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# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



### THESIS

N7 35685

INTEGRATED FINANCIAL REPORTING  
FOR A SMALL BUSINESS

by

Bradford Laurence Martin

D O L

March 1991

Thesis Advisor:

Tarek K. Abdel-Hamid

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**Integrated Financial Reporting  
for a Small Business**

by

**Bradford Laurence Martin  
Captain, United States Marine Corps  
B.S., United States Naval Academy, 1984**

Submitted in partial fulfillment of the requirements  
for the degree of

**MASTER OF SCIENCE IN INFORMATION SYSTEMS**

from the

**NAVAL POSTGRADUATE SCHOOL  
March 1991**

## **ABSTRACT**

The small business manager is faced with increasing competition on a world wide scale in today's marketplace. Business decisions which affect planning and operations are more critical today than in the past. The manager is typically faced with making sense out of large quantities of accounting information. Decision support tools are needed to simplify this endeavor.

Electronic spreadsheets have been used extensively in accounting departments for years. Recently, electronic spreadsheets have dramatically increased in capability while decreasing in price. The objective of this thesis is to demonstrate the feasibility of using off-the-shelf spreadsheet software to develop an integrated financial reporting system for a small business.

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## I. INTRODUCTION

### A. BACKGROUND

Entrepreneurship is alive and well in America. As our economy becomes more tightly integrated with the world's economy, however, even the small business manager is finding that competition for scarce resources is growing keener. Sound financial decision making, consequently, is more critical today than 20 years ago. Small business managers need quick access to structured information that will aid them in their decision making process.

The computer age has brought a wealth of new technologies to the marketplace that show promise as decision making tools. Microcomputers today are as fast and have as much storage as mainframe computers of the 1970's, providing execution speed and storage capacity essential to a decision support system that must analyze large amounts of data and respond to a rapidly business environment.

Software has also grown quickly in capability. Highly sophisticated electronic spreadsheets such as Lotus Development Corporation's 1-2-3 can function as databases, presentation graphics generators, and analytical tools. Macro languages provide the developer with the ability to

access these tremendous capabilities and combine them into complete application packages.

Accessing all this powerful technology requires overcoming a learning curve that is often very steep. Although the cost of these technologies is steadily dropping, it remains significant for the small business. Hiring an application programmer is not practical for the small business manager who may be working out of his garage. The electronic spreadsheets, therefore, need to be simple enough so that the average businessman can produce applications that store, analyze, and display data.

## **B. PURPOSE**

This thesis develops the first module of an integrated decision support system that will help the small business manager to be more productive. The system is called the Small Business Decision Support System (SBDSS). Specifically, this module integrates and automates the reporting of financial statements and business performance measures. The system provides:

- Highly integrated financial statements that only require one-time data entry to increase data consistency.
- Ready access to the previous 12 months of financial data and statistics.
- The ability to reproduce financial data in a report format.

- The ability to do trend analysis of financial data and to display the results of this analysis in a graphical form.
- An easy to use and intuitive menuing system.
- A high degree of self-documentation and other features to enhance maintainability and connectivity with future modules.

### **C. RESEARCH QUESTIONS**

The thesis has one primary research question: Is it possible to integrate and automate the time intensive task of developing financial statements and associated plots of performance indicators? In addition, the following two questions helped guide the research:

- Is Lotus 1-2-3 Release 3.0 an effective development environment for a small business manager, who is a computer novice, to develop useful decision support tools?
- Can a system be designed to reduce redundant data entry and thus improve data consistency across highly integrated financial statements?

### **D. CHAPTER OUTLINE**

This thesis has five chapters. Chapter I, Introduction, provides a background to the factors that spawned the need for this research. The purpose of the thesis and the associated research questions are described in detail. Chapter II, Financial Reporting, explores the function, design, and interrelationships of financial reports.



Chapter III, System Architecture, provides an overview of the structure of the system. Particular emphasis is given to the menu hierarchy. Chapter IV, System Demonstration, is a user's manual to SBDSS. Chapter V, Conclusion, covers lessons learned from this research and recommendations for areas of future research.

## II. FINANCIAL REPORTING

### A. BACKGROUND

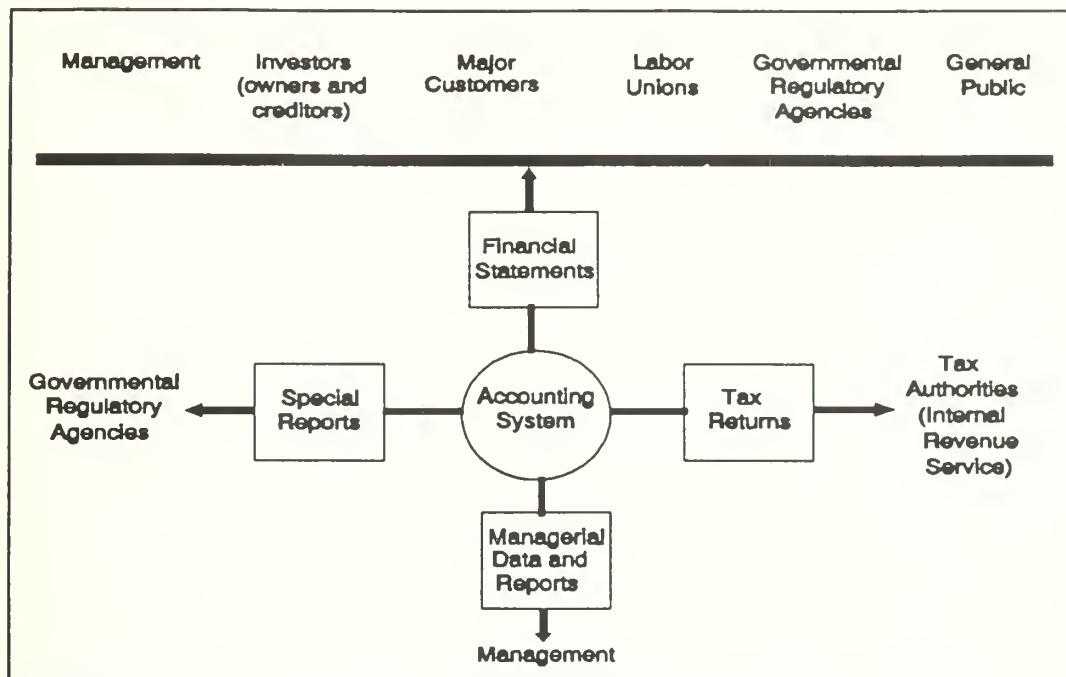
Webster's dictionary defines accounting as "the system of recording and summarizing business and financial transactions and analyzing, verifying, and reporting the results." [Ref. 1:p. 50] Accounting, therefore, bridges the gap between business operations and decision makers inside and outside a business entity. Accurate, highly summarized accounting information is critical to the decision making process. Making decisions is essentially a risky endeavor since the aim is often to affect future events. Highly summarized and accurate accounting information reduces the risk associated with decision making. Managers, bankers, and others thus have an insatiable appetite for such information.

The reporting function is of critical importance to any accounting system. The key is to understand what information is relevant to which decision makers and in what form is it best to communicate this information. A useful analogy is to view the reports generated by an accounting system as the gauges in the cockpit of a commercial airliner. Each gauge presents data in one form or another about the operation of the aircraft. This data is relevant

to one or more of the aircrew at various times and thus becomes information. A particular gauge may not be singularly important. Taken in sum with other gauges or compared to past information, however, the information displayed takes on greater importance. From the cockpit of their aircraft, the aircrew can determine the aircraft's operating efficiency and make the decisions necessary to ensure the effectiveness of the flight.

Many people receive accounting information from business. Each user of accounting information requires that it be presented in a particular form and have a particular content. Figure 1 details the major forms of accounting information produced by the accounting system of a business and the corresponding groups of users for that information.

The focus here is on the common financial statements provided to users both inside and outside a business. Financial statements aid decision makers in finding the financial strength, profitability, and outlook of a business. These statements are the primary source of information to users outside the business [Ref. 2:p. 6]. Bankers, brokers, and government regulatory agencies are keenly interested in the financial health of business organizations. A tremendous volume of accounting data is generated by modern corporations. Therefore, the information contained in financial reports must be of a highly summarized nature yet focused enough to be relevant.



**Figure 1.** Accounting Information Users [Ref. 2:p. 7]

Financial statements, if they are to be useful, must be capable of being easily compared to past statements. Fortunately, the accounting profession over the years has developed generally accepted accounting principles (GAAP). They are "the accounting concepts, measurement techniques, and standards of presentation used in financial statements." [Ref. 2:p. 30] These principles make financial statements easily comparable from one year to the next. Decision makers thus can view the financial performance of a business organization in a historical perspective and derive the information necessary to chart the organization's future course. Investors and bankers can better decide that companies show promise to make the allocation of scarce capital more efficient. Adherence to these principles also



increases the reliability of reported information [Ref. 2:p. 11].

The accounting profession must work diligently to keep abreast of changes in the laws that regulate economic activity and in the diversity of the economic activity itself. Maintenance of the generally accepted accounting principles is the chief responsibility of the Financial Accounting Standards Board (FASB). The FASB has seven members. Their backgrounds range from public and private accounting to accounting education. The FASB is a private entity. Traditionally, accounting standards have been developed and refined in the private sector. The federal government also exercises much influence in this area. The Securities and Exchange Commission (SEC) regulates the content and reporting standards of financial statements for any corporation that offers securities to the public. [Ref. 2:pp. 11-12]

## **B. THE COMMON FINANCIAL STATEMENTS**

The four most common financial statements reported externally are the balance sheet, income statement, statement of retained earnings, and statement of cash flows. Although derived from the same accounting records, each statement takes a somewhat different view of the well being of a business. Taken in sum with past statements, they are tremendous sources of information relating to business

operations. Financial statements are typically a page in length. Each has a heading consisting of the name of the business organization, the name of the statement, and the end date of the period covered by the statement or the date that the report was prepared. Normally, these statements are prepared annually. Many businesses, however, compile them on an interim basis such as monthly or quarterly to make better use of their information. The following paragraphs describe each of these statements, its particular uses, and its interrelationships with the other statements.

### **1. BALANCE SHEET**

The balance sheet is also known as the statement of financial position [Ref. 3:p. 35]. It is a snapshot of a business's financial position on a particular date. The balance sheet has two parts: the heading and the body. As illustrated in Figure 2, the body has three sections: assets, liabilities, and stockholders' equity. The ordering of the elements in each section follows an established pattern. The first asset listed is always cash. Following cash are assets such as accounts receivable and supplies. They will be converted into cash or consumed in business operations in the near future. The last assets listed are more permanent such as land and equipment. Finally, the liabilities are always found above the stockholders' equity. [Ref. 2:pp. 15-16]

# VAGABOND TRAVEL AGENCY, INC.

## Balance Sheet

December 31, 19\_\_

Assets		Liabilities & Stockholders' Equity	
Cash.....	\$ 40,500	Liabilities:	
Notes receivable....	50,000	Notes payable.....	\$ 26,000
Accounts receivable.	62,500	Accounts payable.....	36,000
Supplies.....	2,000	Income taxes payabl.....	18,000
Land.....	100,000		
Building.....	90,000	Total liabilities.....	\$ 80,000
Office equipment....	5,000	Stockholders' equity:	
		Capital stock.....	\$225,000
		Retained earnings.	45,000
			270,000
Total.....	\$350,000	Total.....	\$350,000

**Figure 2:** The Balance Sheet [Ref. 2:p.15]

Assets are defined as "economic resources owned by a business that are expected to benefit future operations." [Ref 2:p. 29] Assets may either be tangible or intangible. Tangible or physical assets include such things as buildings, cash, and office equipment. Intangible assets are often in the form of legal claims or rights. Patent rights are an example of this. Assets, despite of their form, are recorded at their original (historical) cost. This is called the cost principle. The principle, however, creates a problem when someone wants to know how much a business is currently worth. [Ref. 2:p. 16]

Accountants make several assumptions when following the cost principle. First, accountants assume that assets are purchased for use and not for resale. This is called the

going-concern assumption. A business is assumed to be a continuing enterprise. Thus the sale of assets such as land and equipment could seriously impact business operations. The actual value of the assets is not as important as the intention to sell them. Second, accountants assume that the dollar is a stable unit of measurement such as the meter. This works well in times of stable prices. Excessive inflation, however, can render the asset costs meaningless. The cost basis for valuing assets ignores the tremendous fluctuation between the purchasing power of the dollar through time. [Ref. 2:pp. 17-18]

The FASB has attempted to eliminate this weakness of cost basis valuing for assets. The results were not encouraging. The cost of determining current market values and price-level adjustments was greater than the benefits provided. Accountants can point to the objectivity principle as justification for using the cost principle. This principle says that an asset's valuation should be factual and verifiable. Whereas market values are constantly changing, the price paid for an asset is recorded in the business's accounting records. This is an accurate reflection of the owner's valuation of the asset at the time that it was purchased. [Ref. 2:pp. 17-18]

Liabilities are the next section in the body of the balance sheet. Liabilities are also commonly known as debts. Two liabilities are worth noting. Accounts payable



is the liability created by the purchase of goods or services on credit. Notes payable arise from the borrowing of money to meet the business's goals. The business asks a lender to provide a specific sum of money. The lender in return requires that the money must be repaid by a specific time and that the repayment includes interest. The business then issues a formal written promise to repay the money under the restrictions required by the lender. [Ref. 2:pp. 18-19]

The last section of the body of the balance sheet is owners' equity. If the business issues public stock, this section is called stockholders' equity. Owners' equity represents the funds invested by the owners. This is a residual amount since the claims of creditors must legally be fully satisfied first. The accounting equation states that assets equal liabilities plus owners' equity. To clarify the meaning of owners' equity, it is often rewritten as owners' equity equals total assets minus total liabilities. This emphasizes the point that owners' equity is a residual claim on the business' assets. Owners' equity can be increased either by funds invested by the owners or by profits from the business' operations. Conversely, owners' equity can only be decreased by distribution of assets to the owners or by losses incurred in the operation of the business. [Ref. 2:pp. 19-21]

Owners' equity normally has two components: capital stock, retained earnings. Capital stock represents the funds invested in the business by the owners. Capital stock is composed of shares. People who hold these shares are called stockholders. Retained earnings represent those funds not distributed to the owners and retained in the business. The distribution of funds to the owners is in the form of dividends. [Ref. 2:pp. 20-21]

## **2. INCOME STATEMENT**

The income statement shows "the operating results of a business by matching the revenue earned during a given period with the expenses incurred in obtaining that revenue." [Ref. 2:pp. 101] The income statement views the organization over a period rather than on a specific date. This is necessary to understand a business's economic performance as represented by the term net income. The loss or gain in resources over a period is much more meaningful to decision makers than the loss or gain for a single day.

The income statement is divided into revenue and expenses (Figure 3). "Revenue is the price of goods sold and services rendered during a given accounting period." [Ref. 2:p. 86] When a business provides services or delivers goods to a customer it receives payment immediately or it bills the customer for future payment. The future payment is called an account receivable. Revenue can be

separated on an income statement into many categories such as sales, interest earned, and fees earned. Revenues are recorded at the time the services are provided or goods sold to the customer rather than when the cash payment is received. This is known as the realization principle that is another generally accepted accounting principle. [Ref. 2:p. 86]

Expenses, on the other hand, "are the cost of the goods and services used up in the process of earning revenue." [Ref. 2:p. 87] They are, then, the costs associated with developing, producing, marketing, and selling a product. Expenses can be placed into many categories from employee salaries to depreciation of buildings. To determine net income accurately, all expenses must be offset by the revenues they produced. This is called the matching principle. There should be a cause and effect relationship between all expenses and revenues reported for a given period. Recording expenses is not based on when the cash payment was made. Rather, it is based on the period in which the expenditure produced or helped produce the revenue. [Ref. 2:p. 87]

OLYMPIC SPORTING GOODS			
Income Statement			
For the Year Ending December 31, 19__			
Revenue:			
Sales.....		\$617,000	
Less: Sales returns and allowances.....	\$ 12,000		
Sales discounts.....	5,000	17,000	
Net sales.....		\$600,000	
Cost of goods sold:			
Inventory, Jan. 1.....	\$ 60,000		
Purchases.....	\$367,000		
Less: Purchase returns and allowances.....	\$6,700		
Purchase discounts.....	3,300	10,000	
Net purchases.....	\$357,000		
Add: Transportation-in.....	13,000		
Delivered cost of purchases.....		370,000	
Cost of goods available for sale.....		\$430,000	
Less: Inventory, Dec. 31.....		70,000	
Cost of goods sold.....		360,000	
Gross profit on sales.....		\$240,000	
Operating expenses:			
Selling expenses:			
Sales salaries.....	\$ 74,000		
Advertising.....	29,000		
Delivery service.....	10,900		
Depreciation.....	6,000		
Total selling expenses.....		\$119,900	
General & administrative expenses:			
Office salaries.....	\$ 57,000		
Utilities.....	2,100		
Depreciation.....	2,000		
Total general & administrative expenses...		61,100	
Total operating expenses.....		181,000	
Income from operations.....		\$ 59,000	
Income taxes expense.....		9,000	
Net income.....		\$ 50,000	

**Figure 3.** The Income Statement [Ref. 2:p. 190]

### 3. STATEMENT OF RETAINED EARNINGS

The retained earnings statement shows the change in retained earnings during an accounting period (Figure 4). As stated earlier in the discussion of the balance sheet,

retained earnings are that part of owners' equity that is generated by the profitable operation of the business. They are retained by the business rather than being distributed to the owners as dividends.

GREENHILL REAL ESTATE	
Statement of Retained Earnings	
For the Month Ended October 31, 19__	
Retained earnings, Sept. 30, 19__	\$ -0-
Net income for October	2,571
Subtotal	\$2,571
Less: Dividends	1,800
Retained earnings, Oct 31, 19__	\$ 771

**Figure 4.** The Statement of Retained Earnings  
[Ref. 2:p. 101]

#### **4. STATEMENT OF CASH FLOWS**

The fourth common financial statement is the statement of cash flows (Figure 5). This statement builds upon the information contained in the previous statements. Though the balance sheet helps figure out solvency and the income statement helps determine profitability, users of this information also need to assess a business's ability to remain solvent. The basic purpose of the statement of cash flows is to provide information on the origin and amount of cash receipts and on the destination and amounts of cash payments. Cash is defined by the FASB to include cash and



cash equivalents. Cash equivalents are highly liquid, short term investments such as money market funds and Treasury bills. [Ref. 2:pp. 543-547]

ALLISON CORPORATION	
Statement of Cash Flows	
For the Year Ended December 31, 19__	
Cash flows from operating activities:	
Net cash flow from operating activities.....	\$ 50,000
Cash flows from investing activities:	
Purchases of marketable securities.....	\$ (65,000)
Proceeds from sales of marketable securities...	40,000
Loans made.....	(17,000)
Collections on loans.....	12,000
Cash paid to acquire plant assets.....	(160,000)
Proceeds from sales of plant assets.....	75,000
Net cash used by investing activities.....	(115,000)
Cash flows from financing activities:	
Proceeds from short-term borrowing.....	\$ 45,000
Payments to settle short-term debts.....	(55,000)
Proceeds from issuing bonds payable.....	100,000
Proceeds from issuing capital stock.....	50,000
Dividends paid.....	(40,000)
Net cash provided by financing activities.....	100,000
Net increase (decrease) in cash.....	\$ 35,000
Cash and cash equivalents, beginning of year.....	40,000
Cash and cash equivalents, end of year.....	\$ 75,000

**Figure 5.** The Cash Flow Statement [Ref. 2:p. 545]

The body of the statement of cash flows is divided into four parts. The first section, cash flows from operating activities, is of critical importance. A business that cannot raise funds from operations will be hard pressed to gain sufficient funds from investing and financing activities to remain solvent. In addition, investors and

lenders will not commit their funds to a business that cannot develop sufficient funds from its operating activities to make interest payments, pay dividends, etcetera. The second and third sections detail the net cash flow from investing activities and from financing activities. The fourth section displays the net change in cash during the period.

### **C. RELATIONSHIPS BETWEEN FINANCIAL STATEMENTS**

Financial statements by virtue of the common source of their data, are highly interrelated. Each provides a unique view of the business enterprise. This view conveys a large amount of information to user. Taken in sum with the other reports, however, the different views become a more coherent picture of the business enterprise's financial well being as a whole. For example, the casual user may be tempted to view a decrease in retained earnings between two successive balance sheets as a poor trend. To identify the nature of the decrease, the user should look at the statement of retained earnings and the income statement. The statement of retained earnings shows how much of the net income went to the owners as dividends. The remaining amount when added to the retained earnings from the previous accounting period becomes the retained earnings for the current period. The income statement then goes into greater detail explaining the reasons behind the size of the net income.

Similarly, the change in cash from one balance sheet to the next cannot be explained without looking at the statement of cash flows. The statement of cash flows goes into great detail explaining the inflows and outflows for the organization's cash and cash equivalents.

Nearly every entry in the statement of cash flow is dependent on information from the balance sheet or the income statement. The net cash flow from operations is equal to cash received from customers plus investment income minus the cash payments for merchandise and expenses. These quantities are accrual based measurements and must be converted to a cash basis before they can be used. The following examples describe this conversion process and illustrate the interdependence of these financial statements.

The entry Cash Received From Customers may simply be equal to the sales made for cash. Sales, however, are often made on credit. This is called accounts receivable and it is on the balance sheet. If accounts receivable increased during an accounting period, then the sales made on credit exceeded the cash collected on outstanding credit sales. Thus, the true cash received from customers would be equal to net sales minus the increase in accounts receivable. Similarly, if accounts receivable decreased during an accounting period, then credit sales were less than the cash collected on the outstanding credit sales. Thus, the true

cash received from customers would be equal to net sales plus the decrease in accounts receivable. The following formula summarizes this discussion [Ref. 2:p. 551]:

- Cash received from customers =  
    Net sales       + decrease in accounts receivable}  
                    or - increase in accounts receivable}

The entry Cash Payments For Expense is usually very different from the amount of expenses shown on the income statement. The amount of expenses on the income statement is equal to goods and services used during the accounting period. There are several reasons for the difference. First, several expenses do not require a cash payment. Therefore, such non-cash expenses as depreciation, though accounted for on an accrual basis, must be deducted from the total expenses. [Ref. 2:p. 553]

Second, difficulty arises because expenses are recorded when their associated goods or services are used that may not be when the cash payment for the expense was made. Payments made in advance, such as insurance, become an asset known as a prepaid expense. An increase in prepaid expenses must be added to total expenses whereas a decrease must be subtracted. If cash payments are not made until a following period, they become a liability called accrued expense payable. If accrued expense payable increases, then expenses purchased on credit have exceeded cash payments made on the liability. Therefore, the increase should be

subtracted from total expenses. The converse is also true. The following formula summarizes the this discussion [Ref. 2:p. 553]:

- Cash payments for expenses =  
    Expenses - Depreciation and other noncash expenses  
            + {increase in related prepayments}  
            or - {decrease in related prepayments}  
            + {decrease in related accrued liabilities}  
            or - {increase in related accrued liabilities}

The income statement, statement of retained earnings, and statement of cash flows, in essence, form a bridge between consecutive balance sheets. They allow the user to go beyond simple horizontal (trend) analysis. Using vertical analysis on these other statements brings meaning to the changes seen in the balance sheets. A useful analogy is a sailor who watches the surface of the ocean for signs of change. Though the swells increase with the passing days, he cannot be sure if a storm is coming his way or whether it will pass harmlessly by hundreds of miles away. If he has knowledge of the changes in barometric pressure, temperature, wind direction, ocean temperature, etcetera, which is the third dimension, he would know why the swell had changed and if he needed to chart a new course.

### III. SYSTEM ARCHITECTURE

#### A. METHODOLOGY

This system was developed through prototyping. This methodology was chosen for the following reasons:

- The intended user was uncertain about system requirements.
- It provides a working model quickly that aids the user in discovering his real requirements.
- It encourages active end-user participation.
- It allows for rapid development of a working system. This is necessary due to the lack of development time.
- Its iterative nature provides an opportunity to more quickly overcome the learning curve for the development platform.
- It allows for the early detection of errors.

#### B. STRUCTURE

The Small Business Decision Support System (SBDSS) is designed as a stack of four spreadsheets within one file. This reduces the overhead associated with linking several files together. Functionality is divided between the spreadsheets to simplify maintenance. Spreadsheet A contains the financial data. Spreadsheet B contains the User Data Entry Form. Spreadsheet C contains all the macros which power the system's menus. Finally, Spreadsheet D



contains the program documentation consisting of range names, their locations, and brief definitions.

### 1. Spreadsheet A

Spreadsheet A is the financial data storage area for the system. Though Lotus 1-2-3 can function as a sophisticated database, this database is designed as a series of reports. Each series of reports is assigned a range name. The reports on the left are called JANUARY and the far right reports are called DECEMBER. Within each range there are six reports corresponding to the financial reports required by the user each month: Income Statement, Statement of Retained Earnings, Balance Sheet, Statement of Cost of Goods Sold, Statement of Cash Flows, and Performance Indicators. Figures 6 through 11 provide examples of each financial report.

SAPWA		
Statement of Retained Earnings		
For the month ending 01/31/90		
Retained earnings as of	12/31/89	\$0.00
Net income for 'current month'		\$0.00
Less: Dividends		\$0.00
Retained earnings for	01/31/90	-----
		\$0.00
		-----

**Figure 6.** Statement of Retained Earnings

SAPWA  
Income Statement  
For the Month Ending 01/31/90

Revenue:		
Sales		£0.00
Less: Sales tax		£0.00
		-----
Net sales		£0.00
Interest Earned		£0.00
		-----
Total revenue		£0.00
Cost of Goods Sold:		
Inventory, beginning of month		£0.00
Purchases	£0.00	
Add: Customs	£0.00	
Freight	£0.00	
		-----
Delivered cost of purchases		£0.00
		-----
Cost of goods available for sale		£0.00
Less: Inventory, end of month		£0.00
		-----
Cost of goods sold		£0.00
		-----
Gross profit on sales		£0.00
Operating expenses:		
Selling expenses		£0.00
Marketing expenses:		
Advertising	£0.00	
Exhibitions	£0.00	
Seminars	£0.00	
		-----
Total marketing expenses		£0.00
General & admin. expenses:		
Office salaries	£0.00	
Utilities	£0.00	
Travel	£0.00	
Interest	£0.00	
Other	£0.00	
		-----
Total general & admin. expenses:		£0.00
		-----
Total operating expenses		£0.00
		-----
Income from operations		£0.00
Income tax expense		£0.00
		-----
Net income		£0.00
		=====

Figure 7. Income Statement

SAPWA  
Balance Sheet  
For the month ending 01/31/90

Assets:

Current assets:

Cash	£0.00
Bank	£0.00
Accounts receivable	£0.00
Prepaid expenses	£0.00
Merchandise inventory	£0.00
Consumable supplies	£0.00

Total current assets	£0.00
----------------------	-------

Plant and equipment:

Office equipment	£0.00
Furniture	£0.00
Building	£0.00

Total plant and equipment	£0.00
---------------------------	-------

Total assets	£0.00
--------------	-------

Liabilities and Stockholders' Equity:

Current Liabilities:

Accounts payable	£0.00
Income taxes payable	£0.00
Notes payable	£0.00

Total current liabilities	£0.00
---------------------------	-------

Long term debt (Notes payable)	£0.00
--------------------------------	-------

Stockholders' equity:

Capital stock	£0.00
Retained earnings	£0.00

Total stockholders' equity	£0.00
----------------------------	-------

Total liabilities and stockholders' equity	£0.00
--	-------

**Figure 8.** The Balance Sheet

SAPWA  
Statement of Cost of Goods Sold  
For the month ending 01/31/90

Inventory, beginning of month	£0.00
Purchases	£0.00
Add: Customs	£0.00
Freight	£0.00
	-----
Delivered cost of purchases	£0.00
	-----
Cost of goods available for sale	£0.00
Less: Inventory, end of month	£0.00
	-----
Cost of goods sold	£0.00
	=====

**Figure 9.** The Statement of Costs of Goods Sold

SAPWA  
Performance Indicators  
For the month ending 01/31/90

Margin %	0.00
Return on capital	0.00
Asset turnover	0.00
% of gross margin on sales	0.00
Operating expense ratio	0.00
Return on common stockholders' equity	0.00
Working capital	£0.00
Inventory turnover	0.00
Current ratio	0.00

**Figure 10.** Performance Indicators

SAPWA		
Statement of Cash Flows		
For the month ending		01/31/90
Cash flows from operating activities:		
Cash received from customers	£0.00	
Interest received	£0.00	
	-----	
Cash provided by operating actys.		£0.00
Less:		
Cash paid to suppliers	£0.00	
Cash paid to employees	£0.00	
Interest paid	£0.00	
Income taxes paid	£0.00	
Cash payments for expenses	£0.00	
	-----	
Cash disbursed for operating actys.		£0.00
	-----	
Net cash flow from operating activities		£0.00
Cash flows from financing activities:		
Proceeds, short-term borrowing	£0.00	
Proceeds, issuing capital stoc	£0.00	
Less:		
Payments, short-term debts	£0.00	
Dividends paid	£0.00	
	-----	
Net cash provided by financing activities		£0.00
	-----	
Net increase (decrease) in cash		£0.00
Cash and cash equivalents, beginning of month		£0.00
	-----	
Cash and cash equivalents, end of month		£0.00
	-----	

**Figure 11.** Statement of Cash Flows

Spreadsheet A also contains copies of the User Data Entry Form inputted for each month. These forms are located below the respective month's range of reports. They are not, however, associated with these range names. Subsection 2 provides further detail on this form.

This approach has several advantages. First, the financial data is stored in the same report that is used for both viewing and printing. This consistency makes system maintenance less burdensome and helps ensure that the output of the system is always identical with the stored data.

Printing the reports is greatly simplified. The appropriate macro need only print the required range. Advanced formatting is not required since fifty-six rows is the default printing parameter in Lotus 1-2-3. Thus, all forms are printed on a separate sheet without designating page breaks.

Second, storing data in forms also makes it easier to develop macros that manipulate the data. Each data element is in a fixed location. This eliminates the need to account for shifting cell addresses such as occurs when records are appended in a standard Lotus 1-2-3 database application. Also, many data elements are used elsewhere in the reports for a particular month. For example, each form within a month has the same date. Copying the date used in the Income Statement, the first report, into subsequent reports ensures consistency of that data. This also simplifies the macro which copies data into the reports for a particular month. The particular data element need only be copied once into the particular range. After that, embedded formulas ensure data consistency throughout all reports.

In a similar way, when a formula in a report requires a data element that is found in a report from the previous month, it is very simple to retrieve that data since its cell address does not change. For example, in the Statement of Retained Earnings for each month there are two formulas that retrieve data from the previous month. The closing



date and the retained earnings for the previous month are used as the first inputs for finding the retained earnings for the current month.

Third, since there are only twelve months in the database, the user does not have to specify a particular year when he/she wishes to view, print, or plot the data. This reduces the need for user input. Macros can be much simpler when they do not have to deal with error conditions created by inaccurate user input.

Also, the database does not grow with each additional month of data. The data input macro overwrites the data from the same month from the previous year with that from the current year. This keeps the system smaller and less likely to exceed the memory resources of the host computer. The need for maintenance macros is similarly reduced. There is no need to develop macros that purge outdated data.

A potential weakness is the presence of circular references. These are formulas that link the months together so that the solution for a formula becomes the argument for the corresponding formula in the subsequent month. There are two of these references. The retained earnings and cash (and cash equivalents) data elements for the previous month are used in formulas in the current month. If the Global Recalculation setting is set to automatic, all formulas throughout the worksheet will automatically recalculate if any of the arguments change.

Since each month is linked to the one behind and after it, the calculations continue until the value exceeds the length of a cell. This is cured by setting Global Recalculation to manual when the system is started and only allowing macros to recalculate specific ranges.

## 2. Spreadsheet B

Spreadsheet B contains the User Data Entry Form. An example of this form can be seen in Figure 12. This form is used as a template for entering each month's financial data. This form takes advantage of the difference in color between protected and unprotected cells to distinguish the inputted data, in green, from data element labels, in white. The form also contains embedded formulas for converting between currency amounts in U.S. dollars and British pounds.

User Data Entry Form		
Date: (format MM/DD/YY)	>	<
Sales:	>	<
Sales tax:	>	<
Interest earned:	>	<
Purchases for inventory:	>	<
Customs on purchases:	>	<
Freight on purchases:	>	<
Inventory, end of month:	>	<

Figure 12. User Data Entry Form

Selling expenses:	>	<
Advertising expenses:	>	<
Exhibition expenses:	>	<
Seminar expenses:	>	<
Office salaries:	>	<
Utility expenses:	>	<
Travel expenses:	>	<
Interest expenses:	>	<
Income tax expense:	>	<
Other expenses:	>	<
Dividends paid:	>	<
Cash on hand:	>	<
Bank account balances:		
1) in £'s	>	<
2) in \$'s	>	<
Exch rate	>	<
Total	>	<Press F9 for total
Balance of accounts receivable:	>	<
Prepaid expenses:	>	<
Cost of consumable supplies on hand:	>	<
Cost of office equipment owned:	>	<
Cost of furniture owned:	>	<
Cost of building (if owned):	>	<
Balance of accounts payable:	>	<
Income taxes payable:	>	<
Notes payable (less than one year):		
1) B.L.B. £'s	>	<
2) T. \$'s	>	<
3) B.L.B. £'s	>	<
4) Other £'s	>	<
Total	>	<Press F9 for total
Long term debt (greater than one year):	>	<
Capital stock:	>	<
Proceeds from short term borrowing:	>	<
Proceeds from issuing capital stock:	>	<
Payments on short term debts:	>	<

Press ALT-R to restart the command menu

**Figure 12 (cont).** User Data Entry Form

### **3. Spreadsheet C**

Spreadsheet C contains the macros that provide all the functionality for the system. Appendix A contains a complete listing of all macros found in Spreadsheet C. Placing all macros on the same spreadsheet or in the same location is extremely beneficial. This application is large (over 200 kilobytes of disk space) and spans 4 spreadsheets. The operations executed by the macros cover this entire workspace. The flow of instructions can be difficult to trace. Placing all macros in one location greatly simplifies troubleshooting, maintenance and modification.

### **4. Spreadsheet D**

Spreadsheet D contains a complete listing of all range names used in the system (see Appendix B). The cell addresses and a brief description also accompany each range name. This list is produced by using Lotus' self-documentation facilities. This self-documentation feature is extremely useful for system maintenance. The list can be quickly updated. This gives the maintainer with a current and accurate list to use as a reference tool. The maintainer, therefore, benefits by having a ready reference to allow more rapid troubleshooting and modification.

## **C. MENU HIERARCHY**

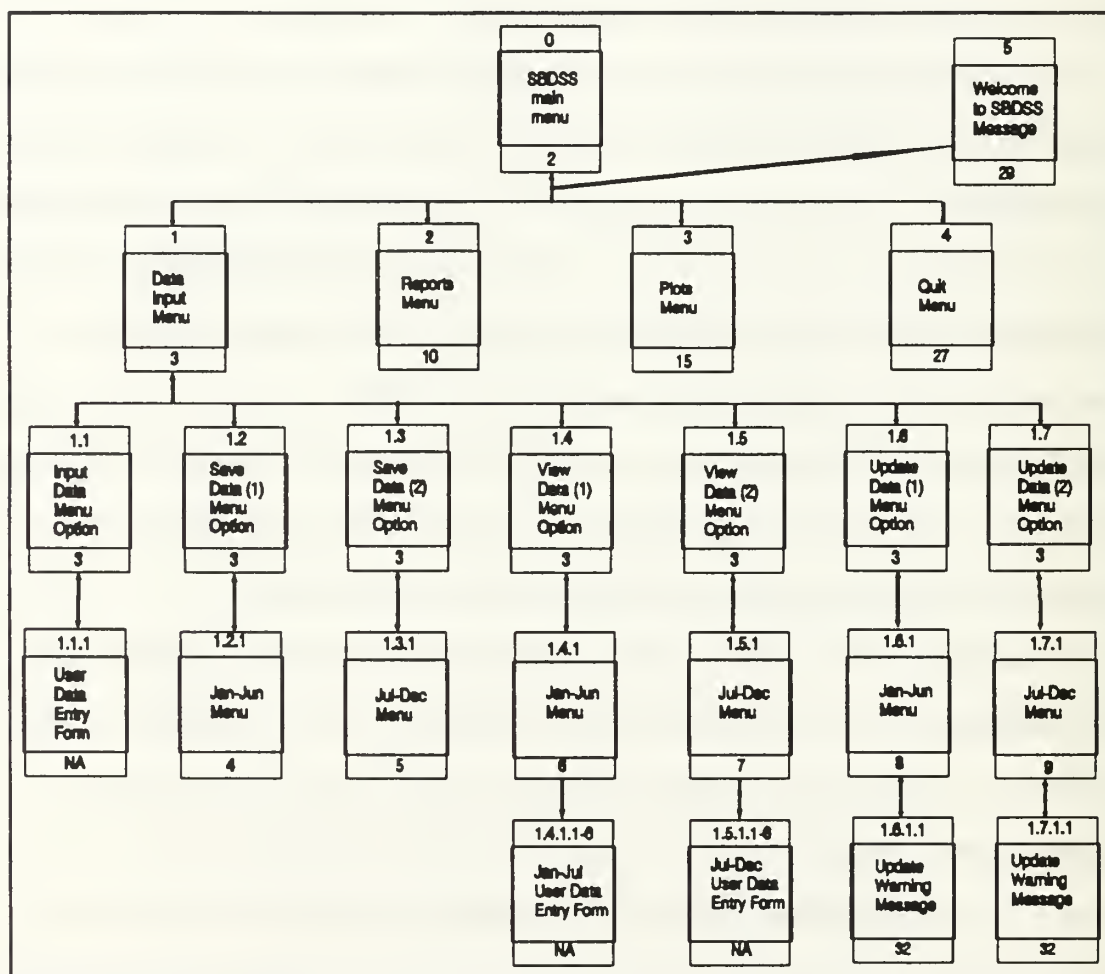
SBDSS uses a customized menuing interface. This approach is very popular among users who only use an

application occasionally [Ref. 4:p. 587]. All menu items are self-explanatory and use terminology common to the user. To reduce the clutter of too many menu items, the menus are designed hierarchically. The branching of the hierarchy is based on the logical flow of choices that the user makes to define what he/she wants to do. The user is able to access any of the tools in the system from anywhere in the menu hierarchy with only a few keystrokes.

Using menus has significant advantages. Even the occasional user is able to quickly learn how to manipulate the system. The user only has to use three keys to access all the features available: LEFT ARROW, RIGHT ARROW, ENTER. Since the menus will only respond to a few keys as input, the macros powering the menus do not have to provide for possible error conditions arising from incorrect user input. Finally, Lotus 1-2-3 provides a rich macro language that makes developing menus somewhat simple and fast.

Dialogue charts provide a powerful tool for evaluating the sequencing and variations of screens seen by the user. Figures 13 through 16 are the dialogue charts for this system. The bidirectional arrows show that the user can move to a subordinate menu or function by selecting that menu option. Then, the user can move to a superior menu by using the ESCAPE key. The arrows also show the flow of control through the menu hierarchy. Each rectangle is divided into three parts. The top section contains a number

that is used to show the ancestry of any menu or screen. The middle section describes the screen, menu, or function. The bottom section refers to the user to the approximate location of the corresponding macro, menu, or screen in Spreadsheet C as illustrated in Figure 17. [Ref. 4:pp. 589-591]



**Figure 13.** The Main Menu including the Data Input Menu



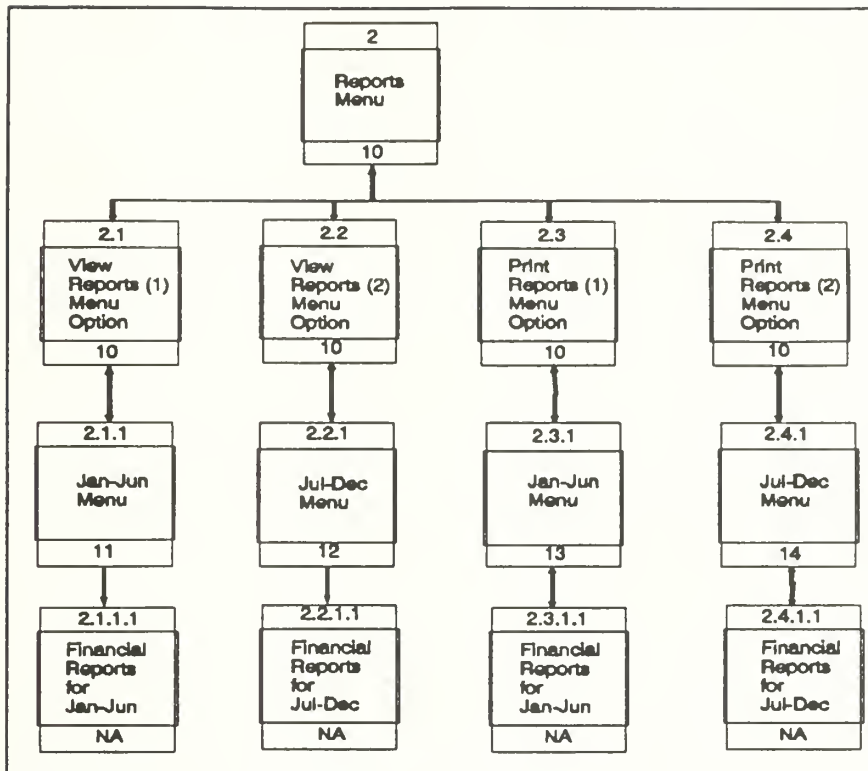


Figure 14. The Reports Menu

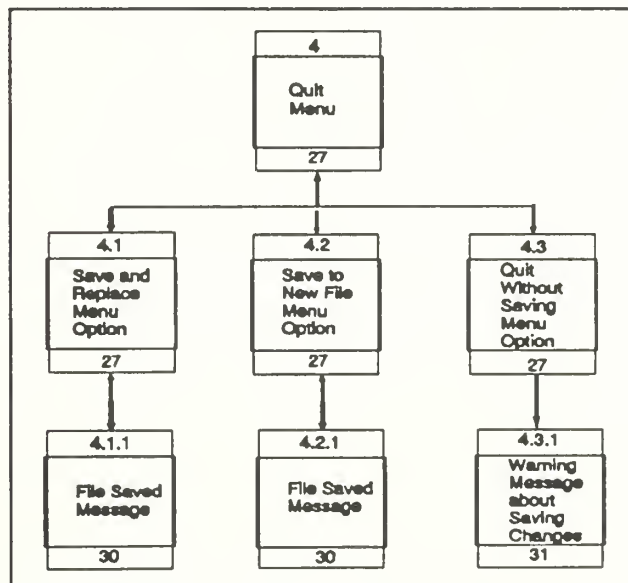


Figure 15. The Quit Menu

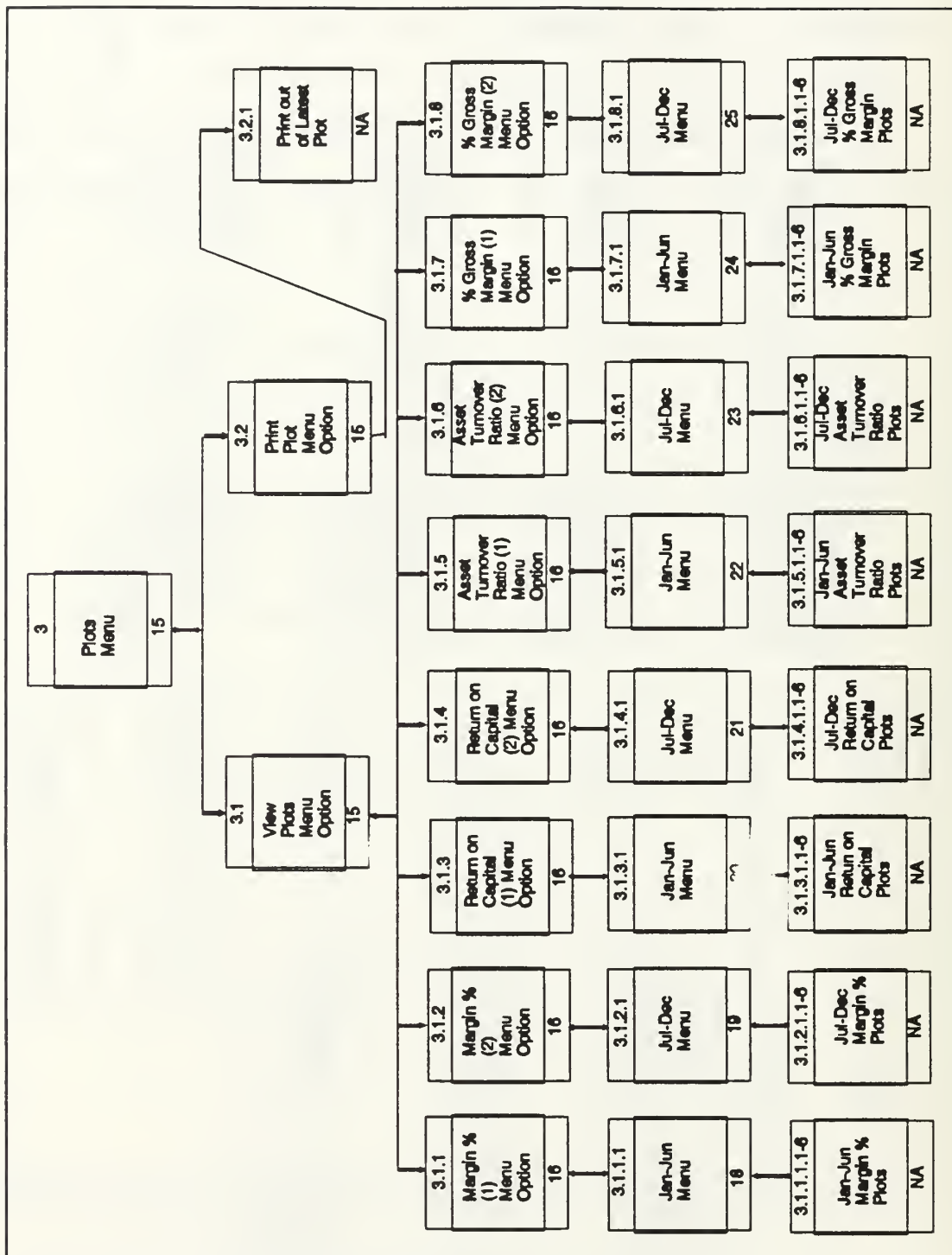
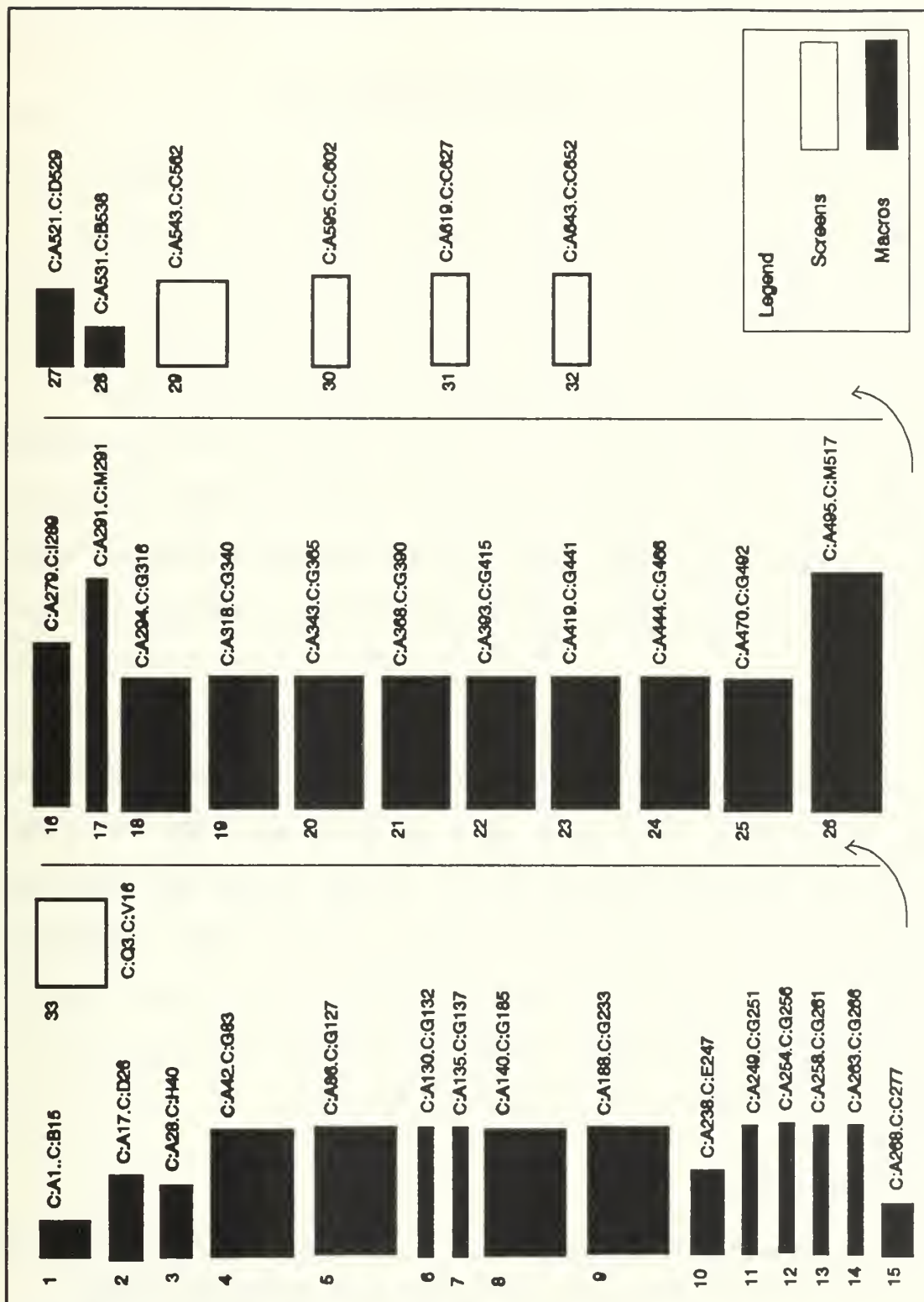


Figure 16. The Plots Menu



**Figure 17.** The Macros, Menus, and Screens in Spreadsheet C

#### **IV. SYSTEM DEMONSTRATION**

The Small Business Decision Support System (SBDSS) is designed to provide the user with powerful tools that can be accessed via customized menus. Each menu item is carefully chosen to be brief yet easily understood by the user. An explanatory subtitle accompanies each menu choice and reduces the need for help screens. The entire functionality of this system is never more than a few keystrokes away. This hierarchial, well defined menu system is the key which allows the user access to all the tools the system has to offer.

The following paragraphs provide a user's guide to traversing the menu structure. The opening screen and MAIN menu (Figure 18) are automatically generated when the user retrieves the application file. The MAIN menu divides the system into four functional modules: DATA INPUT, REPORTS, PLOTS, QUIT. The steps in each module are illustrated by figures showing examples of the screens seen by the user. When appropriate, only a menu is displayed.

##### **A. DATA INPUT**

The user selects DATA INPUT from the MAIN menu when one of four conditions exist. (1) The user needs to input monthly data. (2) The user wishes to save monthly data that

has already been inputted. (3) The user wants to view/modify data that has already been inputted. (4) The user wishes to modify inputted data. After selecting the DATA INPUT menu, the user is presented the menu in Figure 19. The menu items enclosed by brackets are not immediately visible. They can be found using the arrow keys to move left or right and then pressing the RETURN key. There is only one INPUT DATA menu item since this function is not specific to a particular month. It is used to input monthly data into a generic data entry form. SAVE, VIEW, and UPDATE DATA are divided into two parts each because each menu item is specific to a range of six months: (1) January through June, and (2) July through December.

```

DATA INPUT  REPORTS  PLOTS  QUIT
Input data  Save to database  View inputted data  Update data
*****
*                                                    *
*                                                    *
*                                                    *
*                                                    *
*                  Welcome to the                    *
*                  SMALL BUSINESS                     *
*                  DECISION SUPPORT SYSTEM             *
*                  Version 1.0                        *
*                                                    *
*                                                    *
*                                                    *
*                                                    *
*****

```

**Figure 18.** The Main Menu

INPUT DATA	SAVE DATA (1)	SAVE DATA (2)	VIEW DATA (1)	VIEW DATA (2)
Input the new data Into the Data Entry Form				
[UPDATE DATA (1) UPDATE DATA (2)]				

**Figure 19.** Data Input Menu

If the user needs to input monthly data, he/she selects INPUT DATA. This executes a macro that displays the User Data Entry Form and then returns system control to user. Figure 20 contains the top portion of this form. Data is inputted by scrolling to the appropriate cell, typing the value (or label for the month), and pressing return. Two fields, bank account balances and notes payable, have notes to their right which instructs the user to press the F9 function key to execute an imbedded formula. Properly positioned entries are displayed in green. Entries improperly placed appear in white. At the bottom of the User Data Entry Form, the user is instructed to press the ALT and R keys to return the system to the MAIN menu after data input is complete.



User Data Entry Form		
Date: (format MM/DD/YY)	>	<
Sales:	>	<
Sales tax:	>	<
Interest earned:	>	<
Purchases for inventory:	>	<
Customs on purchases:	>	<
Freight on purchases:	>	<
Inventory, end of month:	>	<
Selling expenses:	>	<
Advertising expenses:	>	<

**Figure 20.** The User Data Entry Form

After the user restarts the system, the MAIN menu reappears with a new system logo screen that is used throughout the remainder of the user's session (Figure 21). To begin saving the monthly data, the user should again select the DATA INPUT submenu. As indicated in the menu's subtitle, the user selects SAVE DATA (1) to save data for January through June (Figure 22). SAVE DATA (2) covers the months July through December. This division is needed due to LOTUS 1-2-3's limit of eight menu items per customized menu. The user is now presented with a choice of six months (Figure 23). Selecting the appropriate month, saves the data to the appropriate month's financial reports and recalculates them so they are ready to be viewed or printed. The system then returns the user to the MAIN menu.

[illegible]

Copy data to the database for January - June

---

JAN FEB MAR APR MAY JUN  
Save the data for January

The user may view and modify the data inputted for any month. From the DATA INPUT submenu, the user selects VIEW DATA (1) or VIEW DATA (2) (Figure 24). Now the user must select the appropriate month. Selecting a month brings the corresponding User Data Entry Form to the screen and transfers control back to the user. The user is now free to

modify the data in the same way that the data was inputted. When modifications are complete, the user presses the ALT and R keys to return the system to the MAIN menu.

INPUT DATA	SAVE DATA (1)	SAVE DATA (2)	<b>VIEW DATA (1)</b>	VIEW DATA (2)
View the data inputted for January - June				
<hr/>				
[UPDATE DATA (1) UPDATE DATA (2)]				

**Figure 24.** The Data Input Menu

The modified data must now be saved to the database. Again, the user selects DATA INPUT from the MAIN menu. From the DATA INPUT submenu, the user must select either UPDATE (1) or UPDATE (2) (Figure 25). The user then selects the appropriate month. After the system saves the data and recalculates the formulas in the financial reports, the system displays a warning message to the user (Figure 26). This message reminds the user to do a manual update to the data for every subsequent month up to the current month. Many financial reports either directly or indirectly use data that results from calculations in the previous month. Even if no change is required in the subsequent months, the user still must do the updates.

```
SAVE DATA (2) VIEW DATA (1) VIEW DATA (2) UPDATE DATA (1) UPDATE DATA (2)
Update data inputted for January - June
[ INPUT DATA  SAVE DATA (1) ]
```

**Figure 25.** The Data Input Menu

```
*****
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*****

Warning!

You must update the data in all

subsequent months to ensure

data accuracy!
```

**Figure 26.** Update Data Warning Message

## **B. REPORTS**

The financial reports for any of the last twelve months can be viewed or printed by selecting REPORTS from the MAIN menu (Figure 27). To view financial reports, select either VIEW (1) or VIEW (2) (Figure 28). The user further defines his choice by selecting the desired month from the submenu that appears (Figure 29). The system brings the first report to the display and then turns control over to the user. The user may now scroll up or down to view all the reports. The user should take extreme care not to add,

delete, or modify any of the data. When done viewing, the user must press the ALT and R keys to return the system to the MAIN menu.

DATA INPUT	REPORTS	PLOTS	QUIT
View reports	Print reports		

**Figure 27.** The Main Menu

VIEW (1)	VIEW (1)	PRINT (1)	PRINT (2)
View the financial reports for January - June			

**Figure 28.** The Reports Menu

JAN	FEB	MAR	APR	MAY	JUN
Scroll to view all financial reports for January					

**Figure 29.** The View (1) Menu

The user also may print the reports for any month by selecting either PRINT (1) or PRINT (2) from the REPORTS submenu (Figure 30) and then by selecting the desired month (Figure 31). While printing continues in the background, the system returns the user to the REPORTS submenu. If the user does not wish to view or print any more reports, he/she should press the ESC key and return to the MAIN menu.

```
VIEW (1)  VIEW (2)  PRINT (1)  PRINT (2)
Print the financial reports for January - June
```

**Figure 30.** The Reports Menu

```
JAN  FEB  MAR  APR  MAY  JUN
Print all financial reports for January
```

**Figure 31.** The Print (1) Menu

### C. PLOTS

Plots of the first four performance indicators can be obtained by selecting PLOTS from the MAIN menu (Figure 32). The user must select VIEW PLOTS from this submenu to begin defining that plot to view (Figure 33). The subsequent submenu allows the user to choose that performance indicator he/she would like to view. For instance, the user may want to view a plot of the margin percentage for the last twelve months ending in January. He/she would select MARGIN % (1) from the VIEW PLOTS submenu (Figure 34). The following menu allows the user to select JAN to identify the twelve month range of data that he/she wishes to view. Figure 35 is an example of a performance indicator plot. The user can return to the VIEW PLOTS submenu from the plot being displayed to view more plots by pressing the ESC key.



DATA INPUT	REPORTS	<b>PLOTS</b>	QUIT
View plots	Print plots		

**Figure 32.** The Main Menu

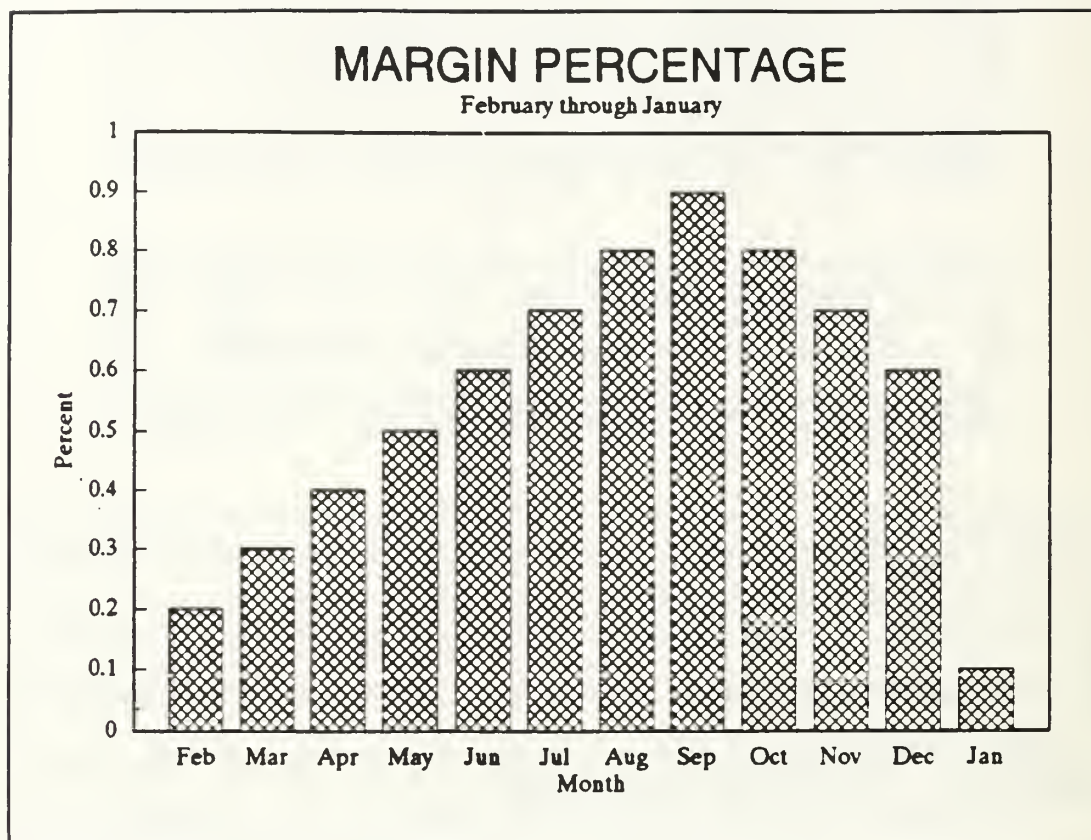
<b>VIEW PLOTS</b>	PRINT PLOTS
View plots of several performance indicators	

**Figure 33.** The Plots Menu

<b>MARGIN % (1)</b>	MARGIN % (2)	RETURN ON CAPITAL (1)	RETURN ON CAPITAL (2)
View a plot of the Margin % ending In January - June			
<hr/>			
[ASSET TURNOVER (1)	ASSET TURNOVER (2)	% GROSS MARGIN ON SALES(1)	
% GROSS MARGIN ON SALES (2)]			

**Figure 34.** The View Plots Menu

If the user views a plot that he/she would like printed, he/she should press the ESC key twice to exit the plot and return to the PLOTS submenu. Now the user must select the menu item PRINT PLOTS (Figure 35). The system begins printing the plot in the background while it returns the user to the VIEW PLOTS submenu. The user may now view other plots and then print them in the same way.



**Figure 35.** Plot of Return on Capital

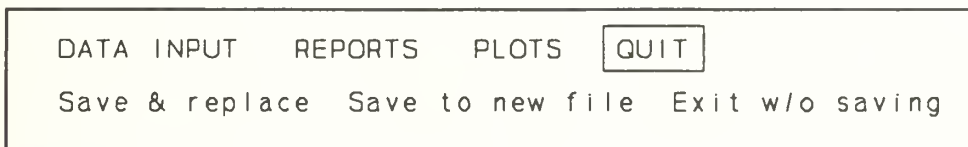
VIEW PLOTS	<div style="border: 1px solid black; padding: 2px; display: inline-block;">PRINT PLOTS</div>
Print the plot most recently viewed	

**Figure 36.** The Plots Menu

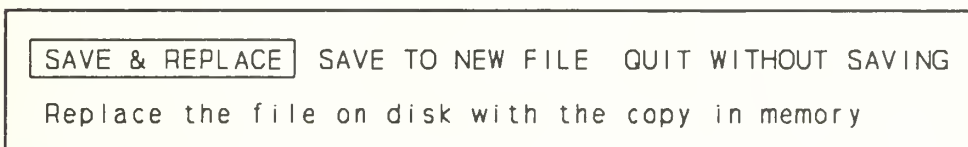
#### **D. QUIT**

The user also may save the current application and/or exit Lotus 1-2-3 by selecting QUIT from the MAIN menu (Figure 37). To save the current file under the same name and in the same location on disk, the user should select the submenu item SAVE & REPLACE (Figure 38). The system uses a

screen to tell the user that his/her file has been successfully saved and that he/she can safely exit Lotus 1-2-3 (Figure 39). The user is then returned to the MAIN menu.



**Figure 37.** The Main Menu



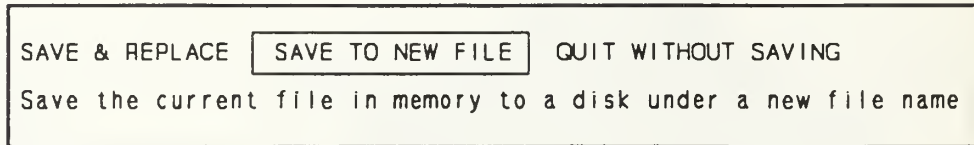
**Figure 38.** The Quit Menu



**Figure 39.** The Successful Save Message

If the user wishes to save the file under a different filename or to a different location (ie. for a backup), the user should select SAVE TO NEW FILE from the QUIT submenu (Figure 40). The system displays the current filename and path in the menu area at the top of the screen (Figure 41). The user may edit the filename and path as required. When finished editing, the user must press the RETURN key to

begin saving the file. When the system displays "Ready" in the upper right hand corner of the screen, the user must press RETURN again to continue.



**Figure 40.** The Quit Menu



**Figure 41.** Lotus 1-2-3 Prompt for New File Name

This is necessary to handle the error condition arising when the filename already exists. There is no way to prompt the user to press RETURN to continue. If this occurs, Lotus 1-2-3 then asks the user via its own menu whether he/she wishes to cancel the operation, replace the file on disk with the file in memory, or to create a backup copy of a file on disk. Selecting CANCEL brings up the screen that tells the user that the file has been successfully saved. This is incorrect but cannot be avoided. After a short delay, the user is returned to the MAIN menu. Selecting REPLACE or BACKUP executes the indicated function, brings up the same screen, and returns the user to the MAIN menu.

The user may select QUIT WITHOUT SAVING from the QUIT submenu to exit Lotus 1-2-3 (Figure 42). The system displays a warning message alerting the user that any



## **V. CONCLUSION**

This thesis examined the feasibility of developing a financial reporting system that could be applied to a small business. The financial reporting model was first developed from generic examples available in accounting textbooks. The model was then refined based on the example of an actual small business. The business provided sample information necessary to define the data requirements and functionality for the system. Finally, Lotus 1-2-3 Release 3.0 was selected as the prototyping environment for the Small Business Decision Support System (SBDSS).

### **A. RESEARCH RESULTS**

The thesis research was guided by a primary and two subordinate research questions.

- Is it possible to automate the time intensive task of developing integrated financial statements and associated plots of performance indicators?

The prototype provides an affirmative answer to this question. The user only has to enter the data once and then use a minimum of keystrokes to produce accurate financial reports and plots of performance measures.



The next question referred to Lotus 1-2-3 Release 3.0 specifically.

- Is Lotus 1-2-3 Release 3.0 an effective development environment for a small business manager, who is a computer novice, to develop useful decision support tools?

This release of Lotus 1-2-3 has proved to be a powerful development environment for the SBDSS prototype. The learning curve is initially very steep before the user can produce substantive macros. The key to success in using this tool is to purchase a variety of Lotus 1-2-3 macro reference books. Lotus is so widely used that nearly any difficulty experienced by the novice has been seen before and documented. These books provide a rich variety of examples that can sometimes be adapted to work in the user's application with a minimum of effort.

The third question deals with data redundancy and consistency.

- Can a system be designed to reduce redundant data entry and thus improve data consistency across highly integrated financial statements?

The SBDSS prototype effectively reduces data entry redundancy and increases data consistency. The user inputs the monthly data only once in the User Data Entry Form despite the number of times that data is used in the various financial reports. Embedded formulas within the reports

ensure that data required in other reports is copied from where it was first received from the User Data Entry Form. Copying from a single source ensures data consistency.

In addition, prototyping proved to be a very useful methodology. Once a sufficient knowledge of the Lotus 1-2-3 macro language was obtained, development proceeded rapidly. The intended user was initially uncertain of system requirements. He provided a general outline of needed functionality and data availability. The first prototype provided the user with a working model that allowed him to refine his real requirements. The user was encouraged to experience the system's user interface and evaluate its suitability. Two successive revisions of the prototype were completed in a very short time due in part to the flexibility inherent in the system's macros. Testing, using sample data, was completed before letting the user evaluate each prototype and revision. Thus, potentially damaging errors in system design and coding were detected early in the development. Prototyping effectively binds the user and the developer into a single team to reduce communication barriers, clarify system requirements, detect errors, and speed development.

## **B. AREAS FOR FUTURE RESEARCH**

Adding functionality to the existing system is the most likely area for future research. The system lacks

comprehensive analytical tools. If the system is capable of vertical and horizontal analysis, it could provide the user with information on the business's profitability, developing problems, weaknesses and strengths, and its operating efficiency. Knowing the pertinent trends and ratios only tells half the story. The underlying drivers to these measures often can only be examined by looking at all the reports for a period.

The primary weakness of the system is the design of the database. A forms based database is not conducive to formal database search, query, and data manipulation techniques. A database consisting of records and using the available database tools in Lotus 1-2-3 would be more efficient. It would require less code to do required data manipulation. Also, since reports only need to generated when required, the size of the database could be reduced significantly.

Portability could be increased in two ways. First, Lotus 1-2-3 can access dBase files. This system could be modified to sit on top of any small businesses database if it is developed in Dbase. Second, the design of the reports could be automated so that a business could customize the system to their particular needs. This separate module would modify existing macros to handle the new data requirements as long as they met established financial reporting standards.

As the system becomes more complex, the menu item descriptions would not provide enough information to help the user in operating the system. Context sensitive help could easily be added and would only be a keystroke away in most circumstances. The screens also could be modified from the generic system logo to a more helpful screen tailored to the specific menu being displayed.

## APPENDIX A

Appendix A contains the macros used in the SBDSS file. The macros are displayed exactly as they appear in Spreadsheet C. They were printed using Lotus 1-2-3's own printing function. The column and row headers are included to make referencing and maintenance easier. Many of the menus and several ranges cannot be printed on a single page due to their width. Therefore, the macros were printed several columns at a time from top to bottom. Each page consists of seventy-three rows. Pages containing adjacent columns in the same range of rows are arranged sequentially. Several macros are also very wide and to appear to be overwritten by the macro in the adjacent column. The macros are complete, however, and may be seen by entering the spreadsheet.

C	A	B	C	D
1	MACROS			
2				
3	\O	{MAIN}		
4				
5	\M	{MAIN}		
6				
7				
8	MAIN	{PRANBOFF}		
9		/RUBanner		
10		{GOTO}Banner		
11		{GOTO}Banner corner		
12		/WGO[C{ESCAPE}]S""QQ		
13		/WGRN		
14		{MENUBRANCH MENU}		
15		{MAIN}		
16				
17	MENU	DATA INPUT	REPORTS	PLOTS
18		Input data Save to database	View reports Print reports	View plots Print plots
19		{MENUBRANCH DATA_INPUT}	{MENUBRANCH REPORTS}	{MENUBRANCH PLOTS}
20		{ESC_2_MENU}	{ESC_2_MENU}	{ESC_2_MENU}
21				
22	ESC_2_MENU	{GOTO}screen		
23		{GOTO}screen_corner		
24		{PRANBOFF}		
25		{MENUBRANCH MENU}		
26		{ESC_2_MENU}		
27				
28	DATA_INPUT	INPUT DATA	SAVE DATA (1)	SAVE DATA (2)
29		Input the new data into the Da	Copy data to the database for	Copy data to the database for
30		/Rdatblinks	{MENUBRANCH PLACE_DATA1}	{MENUBRANCH PLACE_DATA2}
31		/Cbank_balance"datblinks_21"	{ESC2_DATA_INPUT}	{ESC2_DATA_INPUT}
32		/Cnotes_payable"datblinks_30"		
33		{GOTO}entry form		
34		{GOTO}datblinks		
35				
36	ESC2_DATA_INPUT	{GOTO}screen		
37		{GOTO}screen_corner		
38		{PRANBOFF}		
39		{MENUBRANCH DATA_INPUT}		
40		{ESC_2_MENU}		
41				
42	PLACE_DATA1	JAN	FEB	MAR
43		Save the data for January	Save the data for February	Save the data for March
44		/RJanuary	/RFebruary	/RMarch
45		/Cdatblinks_1"jan_month"	/Cdatblinks_1"feb_month"	/Cdatblinks_1"mar_month"
46		/Cdatblinks_2"jan_sales"	/Cdatblinks_2"feb_sales"	/Cdatblinks_2"mar_sales"
47		/Cdatblinks_3"jan_star"	/Cdatblinks_3"feb_star"	/Cdatblinks_3"mar_star"
48		/Cdatblinks_4"jan_interest"	/Cdatblinks_4"feb_interest"	/Cdatblinks_4"mar_interest"
49		/Cdatblinks_5"jan_purchases"	/Cdatblinks_5"feb_purchases"	/Cdatblinks_5"mar_purchases"
50		/Cdatblinks_6"jan_customs"	/Cdatblinks_6"feb_customs"	/Cdatblinks_6"mar_customs"
51		/Cdatblinks_7"jan_freight"	/Cdatblinks_7"feb_freight"	/Cdatblinks_7"mar_freight"
52		/Cdatblinks_8"jan_inventory"	/Cdatblinks_8"feb_inventory"	/Cdatblinks_8"mar_inventory"
53		/Cdatblinks_9"jan_sellexp"	/Cdatblinks_9"feb_sellexp"	/Cdatblinks_9"mar_sellexp"
54		/Cdatblinks_10"jan_advertize"	/Cdatblinks_10"feb_advertize"	/Cdatblinks_10"mar_advertize"
55		/Cdatblinks_11"jan_exhibit"	/Cdatblinks_11"feb_exhibit"	/Cdatblinks_11"mar_exhibit"
56		/Cdatblinks_12"jan_seminars"	/Cdatblinks_12"feb_seminars"	/Cdatblinks_12"mar_seminars"
57		/Cdatblinks_13"jan_salaries"	/Cdatblinks_13"feb_salaries"	/Cdatblinks_13"mar_salaries"
58		/Cdatblinks_14"jan_utilities"	/Cdatblinks_14"feb_utilities"	/Cdatblinks_14"mar_utilities"
59		/Cdatblinks_15"jan_travel"	/Cdatblinks_15"feb_travel"	/Cdatblinks_15"mar_travel"
60		/Cdatblinks_16"jan_intexp"	/Cdatblinks_16"feb_intexp"	/Cdatblinks_16"mar_intexp"
61		/Cdatblinks_17"jan_intax"	/Cdatblinks_17"feb_intax"	/Cdatblinks_17"mar_intax"
62		/Cdatblinks_18"jan_other"	/Cdatblinks_18"feb_other"	/Cdatblinks_18"mar_other"
63		/Cdatblinks_19"jan_dvds"	/Cdatblinks_19"feb_dvds"	/Cdatblinks_19"mar_dvds"
64		/Cdatblinks_20"jan_cash"	/Cdatblinks_20"feb_cash"	/Cdatblinks_20"mar_cash"
65		/RVdatblinks_21"jan_bank"	/RVdatblinks_21"feb_bank"	/RVdatblinks_21"mar_bank"
66		/Cdatblinks_22"jan_acctrcybl"	/Cdatblinks_22"feb_acctrcybl"	/Cdatblinks_22"mar_acctrcybl"
67		/Cdatblinks_23"jan_preexp"	/Cdatblinks_23"feb_preexp"	/Cdatblinks_23"mar_preexp"
68		/Cdatblinks_24"jan_consumable"	/Cdatblinks_24"feb_consumable"	/Cdatblinks_24"mar_consumable"
69		/Cdatblinks_25"jan_offequip"	/Cdatblinks_25"feb_offequip"	/Cdatblinks_25"mar_offequip"
70		/Cdatblinks_26"jan_furniture"	/Cdatblinks_26"feb_furniture"	/Cdatblinks_26"mar_furniture"
71		/Cdatblinks_27"jan_building"	/Cdatblinks_27"feb_building"	/Cdatblinks_27"mar_building"
72		/Cdatblinks_28"jan_acctpay"	/Cdatblinks_28"feb_acctpay"	/Cdatblinks_28"mar_acctpay"
73		/Cdatblinks_29"jan_taxpay"	/Cdatblinks_29"feb_taxpay"	/Cdatblinks_29"mar_taxpay"



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16			
17	QUIT		
18	Save & replace    Save to new file    Exit w/o saving		
19	{MENUBRANCH_PILE}		
20	{BSC2_MENU}		
21			
22			
23			
24			
25			
26			
27			
28	VIEW DATA {1}	VIEW DATA {2}	UPDATE DATA {1}
29	View data inputted for January	View data inputted for July -	Update data inputted for Janua
30	{MENUBRANCH_VIEW_DATA1}	{MENUBRANCH_VIEW_DATA2}	{MENUBRANCH_UPDATE_DATA1}
31	{BSC2_DATA_INPUT}	{BSC2_DATA_INPUT}	{BSC2_DATA_INPUT}
32			
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42	APR	MAY	JUN
43	Save the data for April	Save the data for May	Save the data for June
44	/RUapril	/RUmay	/RUjune
45	/Cdatblnks_1`apr_month`	/Cdatblnks_1`may_month`	/Cdatblnks_1`jun_month`
46	/Cdatblnks_2`apr_sales`	/Cdatblnks_2`may_sales`	/Cdatblnks_2`jun_sales`
47	/Cdatblnks_3`apr_star`	/Cdatblnks_3`may_star`	/Cdatblnks_3`jun_star`
48	/Cdatblnks_4`apr_interest`	/Cdatblnks_4`may_interest`	/Cdatblnks_4`jun_interest`
49	/Cdatblnks_5`apr_purchases`	/Cdatblnks_5`may_purchases`	/Cdatblnks_5`jun_purchases`
50	/Cdatblnks_6`apr_customs`	/Cdatblnks_6`may_customs`	/Cdatblnks_6`jun_customs`
51	/Cdatblnks_7`apr_freight`	/Cdatblnks_7`may_freight`	/Cdatblnks_7`jun_freight`
52	/Cdatblnks_8`apr_inventory`	/Cdatblnks_8`may_inventory`	/Cdatblnks_8`jun_inventory`
53	/Cdatblnks_9`apr_sellexp`	/Cdatblnks_9`may_sellexp`	/Cdatblnks_9`jun_sellexp`
54	/Cdatblnks_10`apr_advertize`	/Cdatblnks_10`may_advertize`	/Cdatblnks_10`jun_advertize`
55	/Cdatblnks_11`apr_exhibit`	/Cdatblnks_11`may_exhibit`	/Cdatblnks_11`jun_exhibit`
56	/Cdatblnks_12`apr_seminars`	/Cdatblnks_12`may_seminars`	/Cdatblnks_12`jun_seminars`
57	/Cdatblnks_13`apr_salaries`	/Cdatblnks_13`may_salaries`	/Cdatblnks_13`jun_salaries`
58	/Cdatblnks_14`apr_utilities`	/Cdatblnks_14`may_utilities`	/Cdatblnks_14`jun_utilities`
59	/Cdatblnks_15`apr_travel`	/Cdatblnks_15`may_travel`	/Cdatblnks_15`jun_travel`
60	/Cdatblnks_16`apr_intexp`	/Cdatblnks_16`may_intexp`	/Cdatblnks_16`jun_intexp`
61	/Cdatblnks_17`apr_intax`	/Cdatblnks_17`may_intax`	/Cdatblnks_17`jun_intax`
62	/Cdatblnks_18`apr_other`	/Cdatblnks_18`may_other`	/Cdatblnks_18`jun_other`
63	/Cdatblnks_19`apr_dvds`	/Cdatblnks_19`may_dvds`	/Cdatblnks_19`jun_dvds`
64	/Cdatblnks_20`apr_cash`	/Cdatblnks_20`may_cash`	/Cdatblnks_20`jun_cash`
65	/RVdatblnks_21`apr_bank`	/RVdatblnks_21`may_bank`	/RVdatblnks_21`jun_bank`
66	/Cdatblnks_22`apr_acctrcybl`	/Cdatblnks_22`may_acctrcybl`	/Cdatblnks_22`jun_acctrcybl`
67	/Cdatblnks_23`apr_preexp`	/Cdatblnks_23`may_preexp`	/Cdatblnks_23`jun_preexp`
68	/Cdatblnks_24`apr_consumable`	/Cdatblnks_24`may_consumable`	/Cdatblnks_24`jun_consumable`
69	/Cdatblnks_25`apr_offequip`	/Cdatblnks_25`may_offequip`	/Cdatblnks_25`jun_offequip`
70	/Cdatblnks_26`apr_furniture`	/Cdatblnks_26`may_furniture`	/Cdatblnks_26`jun_furniture`
71	/Cdatblnks_27`apr_building`	/Cdatblnks_27`may_building`	/Cdatblnks_27`jun_building`
72	/Cdatblnks_28`apr_acctpay`	/Cdatblnks_28`may_acctpay`	/Cdatblnks_28`jun_acctpay`
73	/Cdatblnks_29`apr_taxpay`	/Cdatblnks_29`may_taxpay`	/Cdatblnks_29`jun_taxpay`

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UPDATE DATA (2)  
Update data inputted for July - December  
{WENUBRANCH UPDATE\_DATA2}  
{BSC2\_DATA\_INPUT}

C	L	M	N	O	P	Q	R	S	T	U
1				screen						
2						****				
3						** **				
4						** **	*****			
5						** **	** *			
6						** **	** *	* ****		
7						** **	** *	* ** *		
8						** **	*****	** *	****	
9						** **	** *	* ** *	** *	
10						****	** *	* ** *	** *	****
11						-----	** *	* ** *	** *	** *
12						SBDSS	*****	** *	** *	** *
13						-----	** *	* ** *	** *	** *
14							SBDSS	*****	** *	** *
15							-----	** *	* ** *	** *
16								SBDSS	*****	** *
17								-----	** *	* ** *
18									SBDSS	*****
19									-----	** *
20				screen_corner						SBDSS
21										
22										
23										
24										
25										
26										
27										
28				blank_area						
29										
30										
31										
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C	A	B	C	D
74		/RVdatblnks 30 jan notespay	/RVdatblnks 30 feb notespay	/RVdatblnks 30 mar notespay
75		/Cdatblnks 31 jan longdebt	/Cdatblnks 31 feb longdebt	/Cdatblnks 31 mar longdebt
76		/Cdatblnks 32 jan capstock	/Cdatblnks 32 feb capstock	/Cdatblnks 32 mar capstock
77		/Cdatblnks 33 jan shortborrow	/Cdatblnks 33 feb shortborrow	/Cdatblnks 33 mar shortborrow
78		/Cdatblnks 34 jan isscapstk	/Cdatblnks 34 feb isscapstk	/Cdatblnks 34 mar isscapstk
79		/Cdatblnks 35 jan shortdebt	/Cdatblnks 35 feb shortdebt	/Cdatblnks 35 mar shortdebt
80		/RPjanuary	/RPfebruary	/RPmarch
81		{RBCALC january}	{RBCALC february}	{RBCALC march}
82		/Cdata_entry jan_data	/Cdata_entry feb_data	/Cdata_entry mar_data
83		{BSC_2_WBNU}	{BSC_2_WBNU}	{BSC_2_WBNU}
84				
85				
86	PLACE_DATA2	JUL	AUG	SEP
87		Save the data for July	Save the data for August	Save the data for September
88		/RUjuly	/RUaugust	/RUseptember
89		/Cdatblnks 1 jul month	/Cdatblnks 1 aug month	/Cdatblnks 1 sep month
90		/Cdatblnks 2 jul sales	/Cdatblnks 2 aug sales	/Cdatblnks 2 sep sales
91		/Cdatblnks 3 jul star	/Cdatblnks 3 aug star	/Cdatblnks 3 sep star
92		/Cdatblnks 4 jul interest	/Cdatblnks 4 aug interest	/Cdatblnks 4 sep interest
93		/Cdatblnks 5 jul purchases	/Cdatblnks 5 aug purchases	/Cdatblnks 5 sep purchases
94		/Cdatblnks 6 jul customs	/Cdatblnks 6 aug customs	/Cdatblnks 6 sep customs
95		/Cdatblnks 7 jul freight	/Cdatblnks 7 aug freight	/Cdatblnks 7 sep freight
96		/Cdatblnks 8 jul inventory	/Cdatblnks 8 aug inventory	/Cdatblnks 8 sep inventory
97		/Cdatblnks 9 jul sellexp	/Cdatblnks 9 aug sellexp	/Cdatblnks 9 sep sellexp
98		/Cdatblnks 10 jul advertize	/Cdatblnks 10 aug advertize	/Cdatblnks 10 sep advertize
99		/Cdatblnks 11 jul exhibit	/Cdatblnks 11 aug exhibit	/Cdatblnks 11 sep exhibit
100		/Cdatblnks 12 jul seminars	/Cdatblnks 12 aug seminars	/Cdatblnks 12 sep seminars
101		/Cdatblnks 13 jul salaries	/Cdatblnks 13 aug salaries	/Cdatblnks 13 sep salaries
102		/Cdatblnks 14 jul utilities	/Cdatblnks 14 aug utilities	/Cdatblnks 14 sep utilities
103		/Cdatblnks 15 jul travel	/Cdatblnks 15 aug travel	/Cdatblnks 15 sep travel
104		/Cdatblnks 16 jul interp	/Cdatblnks 16 aug interp	/Cdatblnks 16 sep interp
105		/Cdatblnks 17 jul intax	/Cdatblnks 17 aug intax	/Cdatblnks 17 sep intax
106		/Cdatblnks 18 jul other	/Cdatblnks 18 aug other	/Cdatblnks 18 sep other
107		/Cdatblnks 19 jul dvds	/Cdatblnks 19 aug dvds	/Cdatblnks 19 sep dvds
108		/Cdatblnks 20 jul cash	/Cdatblnks 20 aug cash	/Cdatblnks 20 sep cash
109		/RVdatblnks 21 jul bank	/RVdatblnks 21 aug bank	/RVdatblnks 21 sep bank
110		/Cdatblnks 22 jul acctrcybl	/Cdatblnks 22 aug acctrcybl	/Cdatblnks 22 sep acctrcybl
111		/Cdatblnks 23 jul preexp	/Cdatblnks 23 aug preexp	/Cdatblnks 23 sep preexp
112		/Cdatblnks 24 jul consumable	/Cdatblnks 24 aug consumable	/Cdatblnks 24 sep consumable
113		/Cdatblnks 25 jul offequip	/Cdatblnks 25 aug offequip	/Cdatblnks 25 sep offequip
114		/Cdatblnks 26 jul furniture	/Cdatblnks 26 aug furniture	/Cdatblnks 26 sep furniture
115		/Cdatblnks 27 jul building	/Cdatblnks 27 aug building	/Cdatblnks 27 sep building
116		/Cdatblnks 28 jul acctpay	/Cdatblnks 28 aug acctpay	/Cdatblnks 28 sep acctpay
117		/Cdatblnks 29 jul taxpay	/Cdatblnks 29 aug taxpay	/Cdatblnks 29 sep taxpay
118		/RVdatblnks 30 jul notespay	/RVdatblnks 30 aug notespay	/RVdatblnks 30 sep notespay
119		/Cdatblnks 31 jul longdebt	/Cdatblnks 31 aug longdebt	/Cdatblnks 31 sep longdebt
120		/Cdatblnks 32 jul capstock	/Cdatblnks 32 aug capstock	/Cdatblnks 32 sep capstock
121		/Cdatblnks 33 jul shortborrow	/Cdatblnks 33 aug shortborrow	/Cdatblnks 33 sep shortborrow
122		/Cdatblnks 34 jul isscapstk	/Cdatblnks 34 aug isscapstk	/Cdatblnks 34 sep isscapstk
123		/Cdatblnks 35 jul shortdebt	/Cdatblnks 35 aug shortdebt	/Cdatblnks 35 sep shortdebt
124		/RPjuly	/RPaugust	/RPseptember
125		{RBCALC july}	{RBCALC august}	{RBCALC september}
126		/Cdata_entry jul_data	/Cdata_entry aug_data	/Cdata_entry sep_data
127		{BSC_2_WBNU}	{BSC_2_WBNU}	{BSC_2_WBNU}
128				
129				
130	VIEW_DATA1	JAN	FEB	MAR
131		View the data for January	View the data for February	View the data for March
132		{GOTO}jan_data	{GOTO}feb_data	{GOTO}mar_data
133				
134				
135	VIEW_DATA2	JUL	AUG	SEP
136		View the data for July	View the data for August	View the data for September
137		{GOTO}jul_data	{GOTO}aug_data	{GOTO}sep_data
138				
139				
140	UPDATE_DATA1	JAN	FEB	MAR
141		Save the data for January	Save the data for February	Save the data for March
142		/RUjanuary	/RUfebruary	/RUmarch
143		/Cjan datblnks datblnks	/Cfeb datblnks datblnks	/Cmar datblnks datblnks
144		/Cdatblnks 1 jan month	/Cdatblnks 1 feb month	/Cdatblnks 1 mar month
145		/Cdatblnks 2 jan sales	/Cdatblnks 2 feb sales	/Cdatblnks 2 mar sales
146		/Cdatblnks 3 jan star	/Cdatblnks 3 feb star	/Cdatblnks 3 mar star

C	B	P	G
74 /RVdatblnks 30 apr notespay	/RVdatblnks 30 may notespay	/RVdatblnks 30 jun notespay	
75 /Cdatblnks 31 apr_longdebt	/Cdatblnks 31 may_longdebt	/Cdatblnks 31 jun_longdebt	
76 /Cdatblnks 32 apr_capstock	/Cdatblnks 32 may_capstock	/Cdatblnks 32 jun_capstock	
77 /Cdatblnks 33 apr_shortborrow	/Cdatblnks 33 may_shortborrow	/Cdatblnks 33 jun_shortborrow	
78 /Cdatblnks 34 apr_isscapstk	/Cdatblnks 34 may_isscapstk	/Cdatblnks 34 jun_isscapstk	
79 /Cdatblnks 35 apr_sbortdebt	/Cdatblnks 35 may_sbortdebt	/Cdatblnks 35 jun_sbortdebt	
80 /RPapril	/RPmay	/RPjune	
81 {RECALC april}	{RECALC may}	{RECALC june}	
82 /Cdata_entry apr_data	/Cdata_entry may_data	/Cdata_entry jun_data	
83 {BSC_2_MENU}	{BSC_2_MENU}	{BSC_2_MENU}	
84			
85			
86 OCT	MOV	DEC	
87 Save the data for October	Save the data for November	Save the data for December	
88 /RUoctober	/RUNovember	/RUdecember	
89 /Cdatblnks 1 oct_month	/Cdatblnks 1 nov_month	/Cdatblnks 1 dec_month	
90 /Cdatblnks 2 oct_sales	/Cdatblnks 2 nov_sales	/Cdatblnks 2 dec_sales	
91 /Cdatblnks 3 oct_stax	/Cdatblnks 3 nov_stax	/Cdatblnks 3 dec_stax	
92 /Cdatblnks 4 oct_interest	/Cdatblnks 4 nov_interest	/Cdatblnks 4 dec_interest	
93 /Cdatblnks 5 oct_purchases	/Cdatblnks 5 nov_purchases	/Cdatblnks 5 dec_purchases	
94 /Cdatblnks 6 oct_customs	/Cdatblnks 6 nov_customs	/Cdatblnks 6 dec_customs	
95 /Cdatblnks 7 oct_freight	/Cdatblnks 7 nov_freight	/Cdatblnks 7 dec_freight	
96 /Cdatblnks 8 oct_inventory	/Cdatblnks 8 nov_inventory	/Cdatblnks 8 dec_inventory	
97 /Cdatblnks 9 oct_sellerp	/Cdatblnks 9 nov_sellerp	/Cdatblnks 9 dec_sellerp	
98 /Cdatblnks 10 oct_advertige	/Cdatblnks 10 nov_advertige	/Cdatblnks 10 dec_advertige	
99 /Cdatblnks 11 oct_exhibit	/Cdatblnks 11 nov_exhibit	/Cdatblnks 11 dec_exhibit	
100 /Cdatblnks 12 oct_seminars	/Cdatblnks 12 nov_seminars	/Cdatblnks 12 dec_seminars	
101 /Cdatblnks 13 oct_salaries	/Cdatblnks 13 nov_salaries	/Cdatblnks 13 dec_salaries	
102 /Cdatblnks 14 oct_utilities	/Cdatblnks 14 nov_utilities	/Cdatblnks 14 dec_utilities	
103 /Cdatblnks 15 oct_travel	/Cdatblnks 15 nov_travel	/Cdatblnks 15 dec_travel	
104 /Cdatblnks 16 oct_intexp	/Cdatblnks 16 nov_intexp	/Cdatblnks 16 dec_intexp	
105 /Cdatblnks 17 oct_intax	/Cdatblnks 17 nov_intax	/Cdatblnks 17 dec_intax	
106 /Cdatblnks 18 oct_other	/Cdatblnks 18 nov_other	/Cdatblnks 18 dec_other	
107 /Cdatblnks 19 oct_dvds	/Cdatblnks 19 nov_dvds	/Cdatblnks 19 dec_dvds	
108 /Cdatblnks 20 oct_cash	/Cdatblnks 20 nov_cash	/Cdatblnks 20 dec_cash	
109 /RVdatblnks 21 oct_bank	/RVdatblnks 21 nov_bank	/RVdatblnks 21 dec_bank	
110 /Cdatblnks 22 oct_acctrcybl	/Cdatblnks 22 nov_acctrcybl	/Cdatblnks 22 dec_acctrcybl	
111 /Cdatblnks 23 oct_preexp	/Cdatblnks 23 nov_preexp	/Cdatblnks 23 dec_preexp	
112 /Cdatblnks 24 oct_consumable	/Cdatblnks 24 nov_consumable	/Cdatblnks 24 dec_consumable	
113 /Cdatblnks 25 oct_offequip	/Cdatblnks 25 nov_offequip	/Cdatblnks 25 dec_offequip	
114 /Cdatblnks 26 oct_furniture	/Cdatblnks 26 nov_furniture	/Cdatblnks 26 dec_furniture	
115 /Cdatblnks 27 oct_building	/Cdatblnks 27 nov_building	/Cdatblnks 27 dec_building	
116 /Cdatblnks 28 oct_acctpay	/Cdatblnks 28 nov_acctpay	/Cdatblnks 28 dec_acctpay	
117 /Cdatblnks 29 oct_taxpay	/Cdatblnks 29 nov_taxpay	/Cdatblnks 29 dec_taxpay	
118 /RVdatblnks 30 oct notespay	/RVdatblnks 30 nov notespay	/RVdatblnks 30 dec notespay	
119 /Cdatblnks 31 oct_longdebt	/Cdatblnks 31 nov_longdebt	/Cdatblnks 31 dec_longdebt	
120 /Cdatblnks 32 oct_capstock	/Cdatblnks 32 nov_capstock	/Cdatblnks 32 dec_capstock	
121 /Cdatblnks 33 oct_sbortborrow	/Cdatblnks 33 nov_sbortborrow	/Cdatblnks 33 dec_sbortborrow	
122 /Cdatblnks 34 oct_isscapstk	/Cdatblnks 34 nov_isscapstk	/Cdatblnks 34 dec_isscapstk	
123 /Cdatblnks 35 oct_sbortdebt	/Cdatblnks 35 nov_sbortdebt	/Cdatblnks 35 dec_sbortdebt	
124 /RPoctober	/RPnovember	/RPdecember	
125 {RECALC october}	{RECALC november}	{RECALC december}	
126 /Cdata_entry oct_data	/Cdata_entry nov_data	/Cdata_entry dec_data	
127 {BSC_2_MENU}	{BSC_2_MENU}	{BSC_2_MENU}	
128			
129			
130 APR	MAY	JUN	
131 View the data for April	View the data for May	View the data for June	
132 {GOTO}apr_data	{GOTO}may_data	{GOTO}jun_data	
133			
134			
135 OCT	MOV	DEC	
136 View the data for October	View the data for November	View the data for December	
137 {GOTO}oct_data	{GOTO}nov_data	{GOTO}dec_data	
138			
139			
140 APR	MAY	JUN	
141 Save the data for April	Save the data for May	Save the data for June	
142 /RUapril	/RUNay	/RUjune	
143 /Capr datblnks datblnks	/Cmay datblnks datblnks	/Cjun datblnks datblnks	
144 /Cdatblnks 1 apr_month	/Cdatblnks 1 may_month	/Cdatblnks 1 jun_month	
145 /Cdatblnks 2 apr_sales	/Cdatblnks 2 may_sales	/Cdatblnks 2 jun_sales	
146 /Cdatblnks 3 apr_stax	/Cdatblnks 3 may_stax	/Cdatblnks 3 jun_stax	



C	A	B	C	D
147		/Cdatblnks 4 jan_interest	/Cdatblnks 4 feb_interest	/Cdatblnks 4 mar_interest
148		/Cdatblnks 5 jan_purchases	/Cdatblnks 5 feb_purchases	/Cdatblnks 5 mar_purchases
149		/Cdatblnks 6 jan_customs	/Cdatblnks 6 feb_customs	/Cdatblnks 6 mar_customs
150		/Cdatblnks 7 jan_freight	/Cdatblnks 7 feb_freight	/Cdatblnks 7 mar_freight
151		/Cdatblnks 8 jan_inventory	/Cdatblnks 8 feb_inventory	/Cdatblnks 8 mar_inventory
152		/Cdatblnks 9 jan_sellexp	/Cdatblnks 9 feb_sellexp	/Cdatblnks 9 mar_sellexp
153		/Cdatblnks 10 jan_advertise	/Cdatblnks 10 feb_advertise	/Cdatblnks 10 mar_advertise
154		/Cdatblnks 11 jan_exhibit	/Cdatblnks 11 feb_exhibit	/Cdatblnks 11 mar_exhibit
155		/Cdatblnks 12 jan_seminars	/Cdatblnks 12 feb_seminars	/Cdatblnks 12 mar_seminars
156		/Cdatblnks 13 jan_salaries	/Cdatblnks 13 feb_salaries	/Cdatblnks 13 mar_salaries
157		/Cdatblnks 14 jan_utilities	/Cdatblnks 14 feb_utilities	/Cdatblnks 14 mar_utilities
158		/Cdatblnks 15 jan_travel	/Cdatblnks 15 feb_travel	/Cdatblnks 15 mar_travel
159		/Cdatblnks 16 jan_intexp	/Cdatblnks 16 feb_intexp	/Cdatblnks 16 mar_intexp
160		/Cdatblnks 17 jan_intax	/Cdatblnks 17 feb_intax	/Cdatblnks 17 mar_intax
161		/Cdatblnks 18 jan_other	/Cdatblnks 18 feb_other	/Cdatblnks 18 mar_other
162		/Cdatblnks 19 jan_dvds	/Cdatblnks 19 feb_dvds	/Cdatblnks 19 mar_dvds
163		/Cdatblnks 20 jan_cash	/Cdatblnks 20 feb_cash	/Cdatblnks 20 mar_cash
164		/RVdatblnks 21 jan_bank	/RVdatblnks 21 feb_bank	/RVdatblnks 21 mar_bank
165		/Cdatblnks 22 jan_acctrcvbl	/Cdatblnks 22 feb_acctrcvbl	/Cdatblnks 22 mar_acctrcvbl
166		/Cdatblnks 23 jan_preexp	/Cdatblnks 23 feb_preexp	/Cdatblnks 23 mar_preexp
167		/Cdatblnks 24 jan_consumable	/Cdatblnks 24 feb_consumable	/Cdatblnks 24 mar_consumable
168		/Cdatblnks 25 jan_offequip	/Cdatblnks 25 feb_offequip	/Cdatblnks 25 mar_offequip
169		/Cdatblnks 26 jan_furniture	/Cdatblnks 26 feb_furniture	/Cdatblnks 26 mar_furniture
170		/Cdatblnks 27 jan_building	/Cdatblnks 27 feb_building	/Cdatblnks 27 mar_building
171		/Cdatblnks 28 jan_acctpay	/Cdatblnks 28 feb_acctpay	/Cdatblnks 28 mar_acctpay
172		/Cdatblnks 29 jan_taxpay	/Cdatblnks 29 feb_taxpay	/Cdatblnks 29 mar_taxpay
173		/RVdatblnks 30 jan_notespays	/RVdatblnks 30 feb_notespays	/RVdatblnks 30 mar_notespays
174		/Cdatblnks 31 jan_longdebt	/Cdatblnks 31 feb_longdebt	/Cdatblnks 31 mar_longdebt
175		/Cdatblnks 32 jan_capstock	/Cdatblnks 32 feb_capstock	/Cdatblnks 32 mar_capstock
176		/Cdatblnks 33 jan_sborrborrow	/Cdatblnks 33 feb_sborrborrow	/Cdatblnks 33 mar_sborrborrow
177		/Cdatblnks 34 jan_isscapstk	/Cdatblnks 34 feb_isscapstk	/Cdatblnks 34 mar_isscapstk
178		/Cdatblnks 35 jan_sborrdebt	/Cdatblnks 35 feb_sborrdebt	/Cdatblnks 35 mar_sborrdebt
179		/RJanuary	/RFebruary	/RMarch
180		{RECALC january}	{RECALC february}	{RECALC march}
181		GOTO warning	GOTO warning	GOTO warning
182		{PRAMBOPP}	{PRAMBOPP}	{PRAMBOPP}
183		GOTO warning corner	GOTO warning corner	GOTO warning corner
184		{WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}
185		{ESC_2_MENU}	{ESC_2_MENU}	{ESC_2_MENU}
186				
187				
188	UPDATE_DATA2	JUL	AUG	SEP
189		Save the data for July	Save the data for August	Save the data for September
190		/RJuly	/RAugust	/RSeptember
191		/Cjul datblnks datblnks	/Caug datblnks datblnks	/Csep datblnks datblnks
192		/Cdatblnks 1 jul_month	/Cdatblnks 1 aug_month	/Cdatblnks 1 sep_month
193		/Cdatblnks 2 jul_sales	/Cdatblnks 2 aug_sales	/Cdatblnks 2 sep_sales
194		/Cdatblnks 3 jul_star	/Cdatblnks 3 aug_star	/Cdatblnks 3 sep_star
195		/Cdatblnks 4 jul_interest	/Cdatblnks 4 aug_interest	/Cdatblnks 4 sep_interest
196		/Cdatblnks 5 jul_purchases	/Cdatblnks 5 aug_purchases	/Cdatblnks 5 sep_purchases
197		/Cdatblnks 6 jul_customs	/Cdatblnks 6 aug_customs	/Cdatblnks 6 sep_customs
198		/Cdatblnks 7 jul_freight	/Cdatblnks 7 aug_freight	/Cdatblnks 7 sep_freight
199		/Cdatblnks 8 jul_inventory	/Cdatblnks 8 aug_inventory	/Cdatblnks 8 sep_inventory
200		/Cdatblnks 9 jul_sellexp	/Cdatblnks 9 aug_sellexp	/Cdatblnks 9 sep_sellexp
201		/Cdatblnks 10 jul_advertise	/Cdatblnks 10 aug_advertise	/Cdatblnks 10 sep_advertise
202		/Cdatblnks 11 jul_exhibit	/Cdatblnks 11 aug_exhibit	/Cdatblnks 11 sep_exhibit
203		/Cdatblnks 12 jul_seminars	/Cdatblnks 12 aug_seminars	/Cdatblnks 12 sep_seminars
204		/Cdatblnks 13 jul_salaries	/Cdatblnks 13 aug_salaries	/Cdatblnks 13 sep_salaries
205		/Cdatblnks 14 jul_utilities	/Cdatblnks 14 aug_utilities	/Cdatblnks 14 sep_utilities
206		/Cdatblnks 15 jul_travel	/Cdatblnks 15 aug_travel	/Cdatblnks 15 sep_travel
207		/Cdatblnks 16 jul_intexp	/Cdatblnks 16 aug_intexp	/Cdatblnks 16 sep_intexp
208		/Cdatblnks 17 jul_intax	/Cdatblnks 17 aug_intax	/Cdatblnks 17 sep_intax
209		/Cdatblnks 18 jul_other	/Cdatblnks 18 aug_other	/Cdatblnks 18 sep_other
210		/Cdatblnks 19 jul_dvds	/Cdatblnks 19 aug_dvds	/Cdatblnks 19 sep_dvds
211		/Cdatblnks 20 jul_cash	/Cdatblnks 20 aug_cash	/Cdatblnks 20 sep_cash
212		/RVdatblnks 21 jul_bank	/RVdatblnks 21 aug_bank	/RVdatblnks 21 sep_bank
213		/Cdatblnks 22 jul_acctrcvbl	/Cdatblnks 22 aug_acctrcvbl	/Cdatblnks 22 sep_acctrcvbl
214		/Cdatblnks 23 jul_preexp	/Cdatblnks 23 aug_preexp	/Cdatblnks 23 sep_preexp
215		/Cdatblnks 24 jul_consumable	/Cdatblnks 24 aug_consumable	/Cdatblnks 24 sep_consumable
216		/Cdatblnks 25 jul_offequip	/Cdatblnks 25 aug_offequip	/Cdatblnks 25 sep_offequip
217		/Cdatblnks 26 jul_furniture	/Cdatblnks 26 aug_furniture	/Cdatblnks 26 sep_furniture
218		/Cdatblnks 27 jul_building	/Cdatblnks 27 aug_building	/Cdatblnks 27 sep_building
219		/Cdatblnks 28 jul_acctpay	/Cdatblnks 28 aug_acctpay	/Cdatblnks 28 sep_acctpay



C	B	P	G
147	/Cdatblnks_4 apr_interest	/Cdatblnks_4 may_interest	/Cdatblnks_4 jun_interest
148	/Cdatblnks_5 apr_purchases	/Cdatblnks_5 may_purchases	/Cdatblnks_5 jun_purchases
149	/Cdatblnks_6 apr_customs	/Cdatblnks_6 may_customs	/Cdatblnks_6 jun_customs
150	/Cdatblnks_7 apr_freight	/Cdatblnks_7 may_freight	/Cdatblnks_7 jun_freight
151	/Cdatblnks_8 apr_inventory	/Cdatblnks_8 may_inventory	/Cdatblnks_8 jun_inventory
152	/Cdatblnks_9 apr_sellexp	/Cdatblnks_9 may_sellexp	/Cdatblnks_9 jun_sellexp
153	/Cdatblnks_10 apr_advertise	/Cdatblnks_10 may_advertise	/Cdatblnks_10 jun_advertise
154	/Cdatblnks_11 apr_exhibit	/Cdatblnks_11 may_exhibit	/Cdatblnks_11 jun_exhibit
155	/Cdatblnks_12 apr_seminars	/Cdatblnks_12 may_seminars	/Cdatblnks_12 jun_seminars
156	/Cdatblnks_13 apr_salaries	/Cdatblnks_13 may_salaries	/Cdatblnks_13 jun_salaries
157	/Cdatblnks_14 apr_utilities	/Cdatblnks_14 may_utilities	/Cdatblnks_14 jun_utilities
158	/Cdatblnks_15 apr_travel	/Cdatblnks_15 may_travel	/Cdatblnks_15 jun_travel
159	/Cdatblnks_16 apr_interp	/Cdatblnks_16 may_interp	/Cdatblnks_16 jun_interp
160	/Cdatblnks_17 apr_intax	/Cdatblnks_17 may_intax	/Cdatblnks_17 jun_intax
161	/Cdatblnks_18 apr_other	/Cdatblnks_18 may_other	/Cdatblnks_18 jun_other
162	/Cdatblnks_19 apr_dvds	/Cdatblnks_19 may_dvds	/Cdatblnks_19 jun_dvds
163	/Cdatblnks_20 apr_cash	/Cdatblnks_20 may_cash	/Cdatblnks_20 jun_cash
164	/RVdatblnks_21 apr_bank	/RVdatblnks_21 may_bank	/RVdatblnks_21 jun_bank
165	/Cdatblnks_22 apr_acctrcybl	/Cdatblnks_22 may_acctrcybl	/Cdatblnks_22 jun_acctrcybl
166	/Cdatblnks_23 apr_preexp	/Cdatblnks_23 may_preexp	/Cdatblnks_23 jun_preexp
167	/Cdatblnks_24 apr_consumable	/Cdatblnks_24 may_consumable	/Cdatblnks_24 jun_consumable
168	/Cdatblnks_25 apr_offequip	/Cdatblnks_25 may_offequip	/Cdatblnks_25 jun_offequip
169	/Cdatblnks_26 apr_furniture	/Cdatblnks_26 may_furniture	/Cdatblnks_26 jun_furniture
170	/Cdatblnks_27 apr_building	/Cdatblnks_27 may_building	/Cdatblnks_27 jun_building
171	/Cdatblnks_28 apr_acctpay	/Cdatblnks_28 may_acctpay	/Cdatblnks_28 jun_acctpay
172	/Cdatblnks_29 apr_taxpay	/Cdatblnks_29 may_taxpay	/Cdatblnks_29 jun_taxpay
173	/RVdatblnks_30 apr_notespay	/RVdatblnks_30 may_notespay	/RVdatblnks_30 jun_notespay
174	/Cdatblnks_31 apr_longdebt	/Cdatblnks_31 may_longdebt	/Cdatblnks_31 jun_longdebt
175	/Cdatblnks_32 apr_capstock	/Cdatblnks_32 may_capstock	/Cdatblnks_32 jun_capstock
176	/Cdatblnks_33 apr_sbortborrow	/Cdatblnks_33 may_sbortborrow	/Cdatblnks_33 jun_sbortborrow
177	/Cdatblnks_34 apr_isscapstk	/Cdatblnks_34 may_isscapstk	/Cdatblnks_34 jun_isscapstk
178	/Cdatblnks_35 apr_sbortdebt	/Cdatblnks_35 may_sbortdebt	/Cdatblnks_35 jun_sbortdebt
179	/RPApril	/RPMay	/RPJune
180	{RECALC april}	{RECALC may}	{RECALC june}
181	GOTO warning	GOTO warning	GOTO warning
182	PRAMEOFF	PRAMEOFF	PRAMEOFF
183	GOTO warning corner	GOTO warning corner	GOTO warning corner
184	WAIT @NOW+@TIME(0,0,5}}	WAIT @NOW+@TIME(0,0,5}}	WAIT @NOW+@TIME(0,0,5}}
185	{ESC_2_MENU}	{ESC_2_MENU}	{ESC_2_MENU}
186			
187			
188	OCT	NOV	DEC
189	Save the data for October	Save the data for November	Save the data for December
190	/RUoctober	/RUnovember	/RUdecember
191	/Coct datblnks datblnks	/Cnov datblnks datblnks	/Cdec datblnks datblnks
192	/Cdatblnks_1 oct_month	/Cdatblnks_1 nov_month	/Cdatblnks_1 dec_month
193	/Cdatblnks_2 oct_sales	/Cdatblnks_2 nov_sales	/Cdatblnks_2 dec_sales
194	/Cdatblnks_3 oct_star	/Cdatblnks_3 nov_star	/Cdatblnks_3 dec_star
195	/Cdatblnks_4 oct_interest	/Cdatblnks_4 nov_interest	/Cdatblnks_4 dec_interest
196	/Cdatblnks_5 oct_purchases	/Cdatblnks_5 nov_purchases	/Cdatblnks_5 dec_purchases
197	/Cdatblnks_6 oct_customs	/Cdatblnks_6 nov_customs	/Cdatblnks_6 dec_customs
198	/Cdatblnks_7 oct_freight	/Cdatblnks_7 nov_freight	/Cdatblnks_7 dec_freight
199	/Cdatblnks_8 oct_inventory	/Cdatblnks_8 nov_inventory	/Cdatblnks_8 dec_inventory
200	/Cdatblnks_9 oct_sellexp	/Cdatblnks_9 nov_sellexp	/Cdatblnks_9 dec_sellexp
201	/Cdatblnks_10 oct_advertise	/Cdatblnks_10 nov_advertise	/Cdatblnks_10 dec_advertise
202	/Cdatblnks_11 oct_exhibit	/Cdatblnks_11 nov_exhibit	/Cdatblnks_11 dec_exhibit
203	/Cdatblnks_12 oct_seminars	/Cdatblnks_12 nov_seminars	/Cdatblnks_12 dec_seminars
204	/Cdatblnks_13 oct_salaries	/Cdatblnks_13 nov_salaries	/Cdatblnks_13 dec_salaries
205	/Cdatblnks_14 oct_utilities	/Cdatblnks_14 nov_utilities	/Cdatblnks_14 dec_utilities
206	/Cdatblnks_15 oct_travel	/Cdatblnks_15 nov_travel	/Cdatblnks_15 dec_travel
207	/Cdatblnks_16 oct_interp	/Cdatblnks_16 nov_interp	/Cdatblnks_16 dec_interp
208	/Cdatblnks_17 oct_intax	/Cdatblnks_17 nov_intax	/Cdatblnks_17 dec_intax
209	/Cdatblnks_18 oct_other	/Cdatblnks_18 nov_other	/Cdatblnks_18 dec_other
210	/Cdatblnks_19 oct_dvds	/Cdatblnks_19 nov_dvds	/Cdatblnks_19 dec_dvds
211	/Cdatblnks_20 oct_cash	/Cdatblnks_20 nov_cash	/Cdatblnks_20 dec_cash
212	/RVdatblnks_21 oct_bank	/RVdatblnks_21 nov_bank	/RVdatblnks_21 dec_bank
213	/Cdatblnks_22 oct_acctrcybl	/Cdatblnks_22 nov_acctrcybl	/Cdatblnks_22 dec_acctrcybl
214	/Cdatblnks_23 oct_preexp	/Cdatblnks_23 nov_preexp	/Cdatblnks_23 dec_preexp
215	/Cdatblnks_24 oct_consumable	/Cdatblnks_24 nov_consumable	/Cdatblnks_24 dec_consumable
216	/Cdatblnks_25 oct_offequip	/Cdatblnks_25 nov_offequip	/Cdatblnks_25 dec_offequip
217	/Cdatblnks_26 oct_furniture	/Cdatblnks_26 nov_furniture	/Cdatblnks_26 dec_furniture
218	/Cdatblnks_27 oct_building	/Cdatblnks_27 nov_building	/Cdatblnks_27 dec_building
219	/Cdatblnks_28 oct_acctpay	/Cdatblnks_28 nov_acctpay	/Cdatblnks_28 dec_acctpay

C	A	B	C	D
220	/Cdatblnks 29 jul taxpay	/Cdatblnks 29 aug taxpay	/Cdatblnks 29 sep taxpay	
221	/RVdatblnks 30 jul notespay	/RVdatblnks 30 aug notespay	/RVdatblnks 30 sep notespay	
222	/Cdatblnks 31 jul longdebt	/Cdatblnks 31 aug longdebt	/Cdatblnks 31 sep longdebt	
223	/Cdatblnks 32 jul capstock	/Cdatblnks 32 aug capstock	/Cdatblnks 32 sep capstock	
224	/Cdatblnks 33 jul shortborrow	/Cdatblnks 33 aug shortborrow	/Cdatblnks 33 sep shortborrow	
225	/Cdatblnks 34 jul isscapstk	/Cdatblnks 34 aug isscapstk	/Cdatblnks 34 sep isscapstk	
226	/Cdatblnks 35 jul shortdebt	/Cdatblnks 35 aug shortdebt	/Cdatblnks 35 sep shortdebt	
227	/RPIjul	/RPIaug	/RPIseptember	
228	{RBCALC jul}	{RBCALC aug}	{RBCALC september}	
229	{GOTO}warning	{GOTO}warning	{GOTO}warning	
230	{FRANEOFF}	{FRANEOFF}	{FRANEOFF}	
231	{GOTO}warning_corner	{GOTO}warning_corner	{GOTO}warning_corner	
232	{WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}	
233	{ESC_2_MENU}	{ESC_2_MENU}	{ESC_2_MENU}	
234				
235				
236				
237				
238	REPORTS	VIEW (1)	VIEW (2)	PRINT (1)
239	View the financial reports for	View the financial reports for	View the financial reports for	Print the financial reports fo
240	{MENUBRANCH VIEW_REPORTS1}	{MENUBRANCH VIEW_REPORTS2}	{MENUBRANCH VIEW_REPORTS2}	{MENUBRANCH PRINT_REPORTS1}
241	{ESC_2_REPORTS}	{ESC_2_REPORTS}	{ESC_2_REPORTS}	{ESC_2_REPORTS}
242				
243	ESC_2_REPORTS	{GOTO}screen		
244		{GOTO}screen_corner		
245		{FRANEOFF}		
246		{MENUBRANCH REPORTS}		
247		{ESC_2_MENU}		
248				
249	VIEW_REPORTS1	JAN	FEB	MAR
250	Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r
251	{GOTO}january	{GOTO}february	{GOTO}march	
252				
253				
254	VIEW_REPORTS2	JUL	AUG	SEP
255	Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r
256	{GOTO}july	{GOTO}august	{GOTO}september	
257				
258	PRINT_REPORTS1	JAN	FEB	MAR
259	Print all financial reports fo	Print all financial reports fo	Print all financial reports fo	Print all financial reports fo
260	/PPCARjanuary AGQ	/PPCARfebruary AGQ	/PPCARmarch AGQ	
261	{ESC_2_REPORTS}	{ESC_2_REPORTS}	{ESC_2_REPORTS}	
262				
263	PRINT_REPORTS2	JUL	AUG	SEP
264	Print all financial reports fo	Print all financial reports fo	Print all financial reports fo	Print all financial reports fo
265	/PPCARjuly AGQ	/PPCARaugust AGQ	/PPCARseptember AGQ	
266	{ESC_2_REPORTS}	{ESC_2_REPORTS}	{ESC_2_REPORTS}	
267				
268	PLOTS	VIEW PLOTS	PRINT PLOTS	
269	View plots of several performa	Print the plot most recently viewed		
270	{MENUBRANCH VIEW_PLOT}	{PPCAICAG}{ESC}{ESC}{ESC}		
271	{ESC_2_PLOTS}	{ESC_2_VUPLLOT}		
272				
273	ESC_2_PLOTS	{GOTO}screen		
274		{GOTO}screen_corner		
275		{FRANEOFF}		
276		{MENUBRANCH PLOTS}		
277		{ESC_2_MENU}		
278				
279	VIEW_PLOT	MARGIN % (1)	MARGIN % (2)	RETURN ON CAPITAL (1)
280	View a plot of the Margin % en	View a plot of the Margin % en	View a plot of the Return on C	
281	{MENUBRANCH MONTH1}	{MENUBRANCH MONTH2}	{MENUBRANCH MONTH3}	
282	{ESC_2_VUPLLOT}	{ESC_2_VUPLLOT}	{ESC_2_VUPLLOT}	
283				
284				
285	ESC_2_VUPLLOT	{GOTO}screen		
286		{GOTO}screen_corner		
287		{FRANEOFF}		
288		{MENUBRANCH VIEW_PLOT}		
289		{ESC_2_PLOTS}		
290				
291	SCRATCH_AREA	ERR	ERR	ERR
292				

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220 /Cdatblnks_29 oct_taxpay	/Cdatblnks_29 nov_taxpay	/Cdatblnks_29 dec_taxpay	
221 /RVdatblnks_30 oct_notespay	/RVdatblnks_30 nov_notespay	/RVdatblnks_30 dec_notespay	
222 /Cdatblnks_31 oct_longdebt	/Cdatblnks_31 nov_longdebt	/Cdatblnks_31 dec_longdebt	
223 /Cdatblnks_32 oct_capstock	/Cdatblnks_32 nov_capstock	/Cdatblnks_32 dec_capstock	
224 /Cdatblnks_33 oct_shortborrgw	/Cdatblnks_33 nov_shortborrgw	/Cdatblnks_33 dec_shortborrgw	
225 /Cdatblnks_34 oct_isscapstk	/Cdatblnks_34 nov_isscapstk	/Cdatblnks_34 dec_isscapstk	
226 /Cdatblnks_35 oct_shortdebt	/Cdatblnks_35 nov_shortdebt	/Cdatblnks_35 dec_shortdebt	
227 /RPoctober	/RPnovember	/RPdecember	
228 {RECALC october}	{RECALC november}	{RECALC december}	
229 {GOTO}warning	{GOTO}warning	{GOTO}warning	
230 {FRAMBOPF}	{FRAMBOPF}	{FRAMBOPF}	
231 {GOTO}warning_corner	{GOTO}warning_corner	{GOTO}warning_corner	
232 {WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}	{WAIT @NOW+@TIME(0,0,5)}	
233 {BSC_2_MENU}	{BSC_2_MENU}	{BSC_2_MENU}	
234			
235			
236			
237			
238 PRINT {2}			
239 Print the financial reports for July - December			
240 {MENUBRANCH PRINT_REPORTS2}			
241 {BSC_2_REPORTS}			
242			
243			
244			
245			
246			
247			
248			
249 APR MAY JUN			
250 Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r	
251 {GOTO}april	{GOTO}may	{GOTO}june	
252			
253			
254 OCT NOV DEC			
255 Scroll to view all financial r	Scroll to view all financial r	Scroll to view all financial r	
256 {GOTO}october	{GOTO}november	{GOTO}december	
257			
258 APR MAY JUN			
259 Print all financial reports fo	Print all financial reports fo	Print all financial reports fo	
260 /PPCARapril AGQ	/PPCARmay AGQ	/PPCARjune AGQ	
261 {BSC_2_REPORTS}	{BSC_2_REPORTS}	{BSC_2_REPORTS}	
262			
263 OCT NOV DEC			
264 Print all financial reports fo	Print all financial reports fo	Print all financial reports fo	
265 /PPCARoctober AGQ	/PPCARnovember AGQ	/PPCARdecember AGQ	
266 {BSC_2_REPORTS}	{BSC_2_REPORTS}	{BSC_2_REPORTS}	
267			
268			
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278			
279 RETURN ON CAPITAL (2) ASSET TURNOVER (1) ASSET TURNOVER (2)			
280 View a plot of the Return on C	View a plot of the Asset Turno	View a plot of the Asset Turno	
281 {MENUBRANCH MONTH4}	{MENUBRANCH MONTH5}	{MENUBRANCH MONTH6}	
282 {BSC_2_VUPLOT}	{BSC_2_VUPLOT}	{BSC_2_VUPLOT}	
283			
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290			
291	ERR	ERR	ERR
292			

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250	ports for June			
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255	ports for December			
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264	r December			
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267				
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278				
279	% OF GROSS MARGIN ON SALES (1)% OF GROSS MARGIN ON SALES (2)			
280	View a plot of the % Gross MarView a plot of the % Gross Margin on Sales endin			
281	{MENUBRANCH MONTH7}	{MENUBRANCH MONTH8}		
282	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}		
283				
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291	ERR	ERR	ERR	ERR
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280	g in July - December									
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291	ERR	ERR								
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293				
294	MONTH1	JAN	PFB	MAR
295		View a plot for February through	View a plot for March through	View a plot for April through
296		/RUScratch_area	/RUScratch_area	/RUScratch_area
297		/RVjan_margin_scratch_a12	/RVjan_margin_scratch_a11	/RVjan_margin_scratch_a10
298		/RVfeb_margin_scratch_a1	/RVfeb_margin_scratch_a2	/RVfeb_margin_scratch_a11
299		/RVmar_margin_scratch_a2	/RVmar_margin_scratch_a1	/RVmar_margin_scratch_a12
300		/RVapr_margin_scratch_a3	/RVapr_margin_scratch_a2	/RVapr_margin_scratch_a1
301		/RVmay_margin_scratch_a4	/RVmay_margin_scratch_a3	/RVmay_margin_scratch_a2
302		/RVjun_margin_scratch_a5	/RVjun_margin_scratch_a4	/RVjun_margin_scratch_a3
303		/RVjul_margin_scratch_a6	/RVjul_margin_scratch_a5	/RVjul_margin_scratch_a4
304		/RVaug_margin_scratch_a7	/RVaug_margin_scratch_a6	/RVaug_margin_scratch_a5
305		/RVsep_margin_scratch_a8	/RVsep_margin_scratch_a7	/RVsep_margin_scratch_a6
306		/RVoct_margin_scratch_a9	/RVoct_margin_scratch_a8	/RVoct_margin_scratch_a7
307		/RVnov_margin_scratch_a10	/RVnov_margin_scratch_a9	/RVnov_margin_scratch_a8
308		/RVdec_margin_scratch_a11	/RVdec_margin_scratch_a10	/RVdec_margin_scratch_a9
309		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
310		XPFB JAN	XMAR PFB	XAPR MAR
311		OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE
312		TSPebruary through January	TSMarch through February	TSApril through March
313		TXMonth	TXMonth	TXMonth
314		TYPercent	TYPercent	TYPercent
315		{BSC}VQ	{BSC}VQ	{BSC}VQ
316		{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}
317				
318	MONTH2	JUL	AUG	SEP
319		View a plot for August through	View a plot for September through	View a plot for October through
320		/RUScratch_area	/RUScratch_area	/RUScratch_area
321		/RVjan_margin_scratch_a6	/RVjan_margin_scratch_a5	/RVjan_margin_scratch_a4
322		/RVfeb_margin_scratch_a7	/RVfeb_margin_scratch_a6	/RVfeb_margin_scratch_a5
323		/RVmar_margin_scratch_a8	/RVmar_margin_scratch_a7	/RVmar_margin_scratch_a6
324		/RVapr_margin_scratch_a9	/RVapr_margin_scratch_a8	/RVapr_margin_scratch_a7
325		/RVmay_margin_scratch_a10	/RVmay_margin_scratch_a9	/RVmay_margin_scratch_a8
326		/RVjun_margin_scratch_a11	/RVjun_margin_scratch_a10	/RVjun_margin_scratch_a9
327		/RVjul_margin_scratch_a12	/RVjul_margin_scratch_a11	/RVjul_margin_scratch_a10
328		/RVaug_margin_scratch_a1	/RVaug_margin_scratch_a12	/RVaug_margin_scratch_a11
329		/RVsep_margin_scratch_a2	/RVsep_margin_scratch_a1	/RVsep_margin_scratch_a12
330		/RVoct_margin_scratch_a3	/RVoct_margin_scratch_a2	/RVoct_margin_scratch_a1
331		/RVnov_margin_scratch_a4	/RVnov_margin_scratch_a3	/RVnov_margin_scratch_a2
332		/RVdec_margin_scratch_a5	/RVdec_margin_scratch_a4	/RVdec_margin_scratch_a3
333		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
334		XAUG JUL	XSEP AUG	XOCT SEP
335		OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE
336		TSAugust through July	TSSeptember through August	TSOctober through September
337		TXMonth	TXMonth	TXMonth
338		TYPercent	TYPercent	TYPercent
339		{BSC}VQ	{BSC}VQ	{BSC}VQ
340		{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}
341				
342				
343	MONTH3	JAN	PFB	MAR
344		View a plot for February through	View a plot for March through	View a plot for April through
345		/RUScratch_area	/RUScratch_area	/RUScratch_area
346		/RVjan_return_scratch_a12	/RVjan_return_scratch_a11	/RVjan_return_scratch_a10
347		/RVfeb_return_scratch_a1	/RVfeb_return_scratch_a12	/RVfeb_return_scratch_a11
348		/RVmar_return_scratch_a2	/RVmar_return_scratch_a1	/RVmar_return_scratch_a12
349		/RVapr_return_scratch_a3	/RVapr_return_scratch_a2	/RVapr_return_scratch_a1
350		/RVmay_return_scratch_a4	/RVmay_return_scratch_a3	/RVmay_return_scratch_a2
351		/RVjun_return_scratch_a5	/RVjun_return_scratch_a4	/RVjun_return_scratch_a3
352		/RVjul_return_scratch_a6	/RVjul_return_scratch_a5	/RVjul_return_scratch_a4
353		/RVaug_return_scratch_a7	/RVaug_return_scratch_a6	/RVaug_return_scratch_a5
354		/RVsep_return_scratch_a8	/RVsep_return_scratch_a7	/RVsep_return_scratch_a6
355		/RVoct_return_scratch_a9	/RVoct_return_scratch_a8	/RVoct_return_scratch_a7
356		/RVnov_return_scratch_a10	/RVnov_return_scratch_a9	/RVnov_return_scratch_a8
357		/RVdec_return_scratch_a11	/RVdec_return_scratch_a10	/RVdec_return_scratch_a9
358		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
359		XPFB JAN	XMAR PFB	XAPR MAR
360		OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL
361		TSPebruary through January	TSMarch through February	TSApril through March
362		TXMonth	TXMonth	TXMonth
363		TYPercent	TYPercent	TYPercent
364		{BSC}VQ	{BSC}VQ	{BSC}VQ
365		{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}



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293			
294	APR	MAY	JUN
295	View a plot for May through April	View a plot for June through May	View a plot for July through June
296	/RUscratch_area	/RUscratch_area	/RUscratch_area
297	/RVjan_margin_scratch_a9	/RVjan_margin_scratch_a8	/RVjan_margin_scratch_a7
298	/RVfeb_margin_scratch_a10	/RVfeb_margin_scratch_a9	/RVfeb_margin_scratch_a8
299	/RVmar_margin_scratch_a11	/RVmar_margin_scratch_a10	/RVmar_margin_scratch_a9
300	/RVapr_margin_scratch_a12	/RVapr_margin_scratch_a11	/RVapr_margin_scratch_a10
301	/RVmay_margin_scratch_a1	/RVmay_margin_scratch_a12	/RVmay_margin_scratch_a11
302	/RVjun_margin_scratch_a2	/RVjun_margin_scratch_a1	/RVjun_margin_scratch_a12
303	/RVjul_margin_scratch_a3	/RVjul_margin_scratch_a2	/RVjul_margin_scratch_a1
304	/RVaug_margin_scratch_a4	/RVaug_margin_scratch_a3	/RVaug_margin_scratch_a2
305	/RVsep_margin_scratch_a5	/RVsep_margin_scratch_a4	/RVsep_margin_scratch_a3
306	/RVoct_margin_scratch_a6	/RVoct_margin_scratch_a5	/RVoct_margin_scratch_a4
307	/RVnov_margin_scratch_a7	/RVnov_margin_scratch_a6	/RVnov_margin_scratch_a5
308	/RVdec_margin_scratch_a8	/RVdec_margin_scratch_a7	/RVdec_margin_scratch_a6
309	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
310	XMAY APR	XJUN MAY	XJUL JUN
311	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE
312	TSMay through April	TSJune through May	TSJuly through June
313	TXMonth	TXMonth	TXMonth
314	TYPercent	TYPercent	TYPercent
315	{BSC}VQ	{BSC}VQ	{BSC}VQ
316	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}
317			
318	OCT	NOV	DEC
319	View a plot for November through October	View a plot for December through November	VIEW GRAPH FOR JANUARY THROUGH DECEMBER
320	/RUscratch_area	/RUscratch_area	/RUscratch_area
321	/RVjan_margin_scratch_a3	/RVjan_margin_scratch_a2	/RVjan_margin_scratch_a1
322	/RVfeb_margin_scratch_a4	/RVfeb_margin_scratch_a3	/RVfeb_margin_scratch_a2
323	/RVmar_margin_scratch_a5	/RVmar_margin_scratch_a4	/RVmar_margin_scratch_a3
324	/RVapr_margin_scratch_a6	/RVapr_margin_scratch_a5	/RVapr_margin_scratch_a4
325	/RVmay_margin_scratch_a7	/RVmay_margin_scratch_a6	/RVmay_margin_scratch_a5
326	/RVjun_margin_scratch_a8	/RVjun_margin_scratch_a7	/RVjun_margin_scratch_a6
327	/RVjul_margin_scratch_a9	/RVjul_margin_scratch_a8	/RVjul_margin_scratch_a7
328	/RVaug_margin_scratch_a10	/RVaug_margin_scratch_a9	/RVaug_margin_scratch_a8
329	/RVsep_margin_scratch_a11	/RVsep_margin_scratch_a10	/RVsep_margin_scratch_a9
330	/RVoct_margin_scratch_a12	/RVoct_margin_scratch_a11	/RVoct_margin_scratch_a10
331	/RVnov_margin_scratch_a1	/RVnov_margin_scratch_a12	/RVnov_margin_scratch_a11
332	/RVdec_margin_scratch_a2	/RVdec_margin_scratch_a1	/RVdec_margin_scratch_a12
333	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
334	XNOV OCT	XDEC NOV	XJAN DEC
335	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE	OTPMARGIN PERCENTAGE
336	TSNovember through October	TSDecember through November	TSJanuary through December
337	TXMonth	TXMonth	TXMonth
338	TYPercent	TYPercent	TYPercent
339	{BSC}VQ	{BSC}VQ	{BSC}VQ
340	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}
341			
342			
343	APR	MAY	JUN
344	View a plot for May through April	View a plot for June through May	View a plot for July through June
345	/RUscratch_area	/RUscratch_area	/RUscratch_area
346	/RVjan_return_scratch_a9	/RVjan_return_scratch_a8	/RVjan_return_scratch_a7
347	/RVfeb_return_scratch_a10	/RVfeb_return_scratch_a9	/RVfeb_return_scratch_a8
348	/RVmar_return_scratch_a11	/RVmar_return_scratch_a10	/RVmar_return_scratch_a9
349	/RVapr_return_scratch_a12	/RVapr_return_scratch_a11	/RVapr_return_scratch_a10
350	/RVmay_return_scratch_a1	/RVmay_return_scratch_a12	/RVmay_return_scratch_a11
351	/RVjun_return_scratch_a2	/RVjun_return_scratch_a1	/RVjun_return_scratch_a12
352	/RVjul_return_scratch_a3	/RVjul_return_scratch_a2	/RVjul_return_scratch_a1
353	/RVaug_return_scratch_a4	/RVaug_return_scratch_a3	/RVaug_return_scratch_a2
354	/RVsep_return_scratch_a5	/RVsep_return_scratch_a4	/RVsep_return_scratch_a3
355	/RVoct_return_scratch_a6	/RVoct_return_scratch_a5	/RVoct_return_scratch_a4
356	/RVnov_return_scratch_a7	/RVnov_return_scratch_a6	/RVnov_return_scratch_a5
357	/RVdec_return_scratch_a8	/RVdec_return_scratch_a7	/RVdec_return_scratch_a6
358	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
359	XMAY APR	XJUN MAY	XJUL JUN
360	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL
361	TSMay through April	TSJune through May	TSJuly through June
362	TXMonth	TXMonth	TXMonth
363	TYPercent	TYPercent	TYPercent
364	{BSC}VQ	{BSC}VQ	{BSC}VQ
365	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}	{ESC_2_VUPL0T}

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368	MONTH4	JUL	AUG	SEP
369		View a plot for August through July	View a plot for September through August	View a plot for October through September
370		/RUScratch_area	/RUScratch_area	/RUScratch_area
371		/RVjan_return_scratch_a6	/RVjan_return_scratch_a5	/RVjan_return_scratch_a4
372		/RVfeb_return_scratch_a7	/RVfeb_return_scratch_a6	/RVfeb_return_scratch_a5
373		/RVmar_return_scratch_a8	/RVmar_return_scratch_a7	/RVmar_return_scratch_a6
374		/RVapr_return_scratch_a9	/RVapr_return_scratch_a8	/RVapr_return_scratch_a7
375		/RVmay_return_scratch_a10	/RVmay_return_scratch_a9	/RVmay_return_scratch_a8
376		/RVjun_return_scratch_a11	/RVjun_return_scratch_a10	/RVjun_return_scratch_a9
377		/RVjul_return_scratch_a12	/RVjul_return_scratch_a11	/RVjul_return_scratch_a10
378		/RVaug_return_scratch_a1	/RVaug_return_scratch_a12	/RVaug_return_scratch_a11
379		/RVsep_return_scratch_a2	/RVsep_return_scratch_a1	/RVsep_return_scratch_a12
380		/RVoct_return_scratch_a3	/RVoct_return_scratch_a2	/RVoct_return_scratch_a1
381		/RVnov_return_scratch_a4	/RVnov_return_scratch_a3	/RVnov_return_scratch_a2
382		/RVdec_return_scratch_a5	/RVdec_return_scratch_a4	/RVdec_return_scratch_a3
383		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
384		XAUG JUL	XSEP AUG	XOCT SEP
385		OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL
386		TSAugust through July	TSSeptember through August	TSoctober through September
387		TXMonth	TXMonth	TXMonth
388		TYPercent	TYPercent	TYPercent
389		{BSC}VQ	{BSC}VQ	{BSC}VQ
390		{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}
391				
392				
393	MONTH5	JAN	FEB	MAR
394		View a plot for February through January	View a plot for March through February	View a plot for April through March
395		/RUScratch_area	/RUScratch_area	/RUScratch_area
396		/RVjan_asset_scratch_a12	/RVjan_asset_scratch_a11	/RVjan_asset_scratch_a10
397		/RVfeb_asset_scratch_a1	/RVfeb_asset_scratch_a12	/RVfeb_asset_scratch_a11
398		/RVmar_asset_scratch_a2	/RVmar_asset_scratch_a1	/RVmar_asset_scratch_a12
399		/RVapr_asset_scratch_a3	/RVapr_asset_scratch_a2	/RVapr_asset_scratch_a1
400		/RVmay_asset_scratch_a4	/RVmay_asset_scratch_a3	/RVmay_asset_scratch_a2
401		/RVjun_asset_scratch_a5	/RVjun_asset_scratch_a4	/RVjun_asset_scratch_a3
402		/RVjul_asset_scratch_a6	/RVjul_asset_scratch_a5	/RVjul_asset_scratch_a4
403		/RVaug_asset_scratch_a7	/RVaug_asset_scratch_a6	/RVaug_asset_scratch_a5
404		/RVsep_asset_scratch_a8	/RVsep_asset_scratch_a7	/RVsep_asset_scratch_a6
405		/RVoct_asset_scratch_a9	/RVoct_asset_scratch_a8	/RVoct_asset_scratch_a7
406		/RVnov_asset_scratch_a10	/RVnov_asset_scratch_a9	/RVnov_asset_scratch_a8
407		/RVdec_asset_scratch_a11	/RVdec_asset_scratch_a10	/RVdec_asset_scratch_a9
408		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
409		XFEB JAN	XMAR FEB	XAPR MAR
410		OTPASSET TURNOVER	OTPASSET TURNOVER	OTPASSET TURNOVER
411		TSEbruary through January	TSMarch through February	TSApril through March
412		TXMonth	TXMonth	TXMonth
413		TYPercent	TYPercent	TYPercent
414		{BSC}VQ	{BSC}VQ	{BSC}VQ
415		{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}	{BSC_2_VUPLLOT}
416				
417				
418				
419	MONTH6	JUL	AUG	SEP
420		View a plot for August through July	View a plot for September through August	View a plot for October through September
421		/RUScratch_area	/RUScratch_area	/RUScratch_area
422		/RVjan_asset_scratch_a6	/RVjan_asset_scratch_a5	/RVjan_asset_scratch_a4
423		/RVfeb_asset_scratch_a7	/RVfeb_asset_scratch_a6	/RVfeb_asset_scratch_a5
424		/RVmar_asset_scratch_a8	/RVmar_asset_scratch_a7	/RVmar_asset_scratch_a6
425		/RVapr_asset_scratch_a9	/RVapr_asset_scratch_a8	/RVapr_asset_scratch_a7
426		/RVmay_asset_scratch_a10	/RVmay_asset_scratch_a9	/RVmay_asset_scratch_a8
427		/RVjun_asset_scratch_a11	/RVjun_asset_scratch_a10	/RVjun_asset_scratch_a9
428		/RVjul_asset_scratch_a12	/RVjul_asset_scratch_a11	/RVjul_asset_scratch_a10
429		/RVaug_asset_scratch_a1	/RVaug_asset_scratch_a12	/RVaug_asset_scratch_a11
430		/RVsep_asset_scratch_a2	/RVsep_asset_scratch_a1	/RVsep_asset_scratch_a12
431		/RVoct_asset_scratch_a3	/RVoct_asset_scratch_a2	/RVoct_asset_scratch_a1
432		/RVnov_asset_scratch_a4	/RVnov_asset_scratch_a3	/RVnov_asset_scratch_a2
433		/RVdec_asset_scratch_a5	/RVdec_asset_scratch_a4	/RVdec_asset_scratch_a3
434		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
435		XAUG JUL	XSEP AUG	XOCT SEP
436		OTPASSET TURNOVER	OTPASSET TURNOVER	OTPASSET TURNOVER
437		TSAugust through July	TSSeptember through August	TSoctober through September
438		TXMonth	TXMonth	TXMonth

C	B	F	G
366			
367			
368	OCT	NOV	DEC
369	View a plot for November through	View a plot for December through	VIEW GRAPB FOR JANUARY THROUGH
370	/RUscratch_area	/RUscratch_area	/RUscratch_area
371	/RVjan_return_scratch_a3	/RVjan_return_scratch_a2	/RVjan_return_scratch_a1
372	/RVfeb_return_scratch_a4	/RVfeb_return_scratch_a3	/RVfeb_return_scratch_a2
373	/RVmar_return_scratch_a5	/RVmar_return_scratch_a4	/RVmar_return_scratch_a3
374	/RVapr_return_scratch_a6	/RVapr_return_scratch_a5	/RVapr_return_scratch_a4
375	/RVmay_return_scratch_a7	/RVmay_return_scratch_a6	/RVmay_return_scratch_a5
376	/RVjun_return_scratch_a8	/RVjun_return_scratch_a7	/RVjun_return_scratch_a6
377	/RVjul_return_scratch_a9	/RVjul_return_scratch_a8	/RVjul_return_scratch_a7
378	/RVaug_return_scratch_a10	/RVaug_return_scratch_a9	/RVaug_return_scratch_a8
379	/RVsep_return_scratch_a11	/RVsep_return_scratch_a10	/RVsep_return_scratch_a9
380	/RVoct_return_scratch_a12	/RVoct_return_scratch_a11	/RVoct_return_scratch_a10
381	/RVnov_return_scratch_a1	/RVnov_return_scratch_a12	/RVnov_return_scratch_a11
382	/RVdec_return_scratch_a2	/RVdec_return_scratch_a1	/RVdec_return_scratch_a12
383	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
384	XNOV OCT	XDEC NOV	XJAN DEC
385	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL	OTPRETURN ON CAPITAL
386	TSNovember through October	TSDecember through November	TSJanuary through December
387	TXMonth	TXMonth	TXMonth
388	TYPercent	TYPercent	TYPercent
389	{BSC}VQ	{BSC}VQ	{BSC}VQ
390	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}
391			
392			
393	APR	MAY	JUN
394	View a plot for May through	Apview a plot for June through	MView a plot for July through J
395	/RUscratch_area	/RUscratch_area	/RUscratch_area
396	/RVjan_asset_scratch_a9	/RVjan_asset_scratch_a8	/RVjan_asset_scratch_a7
397	/RVfeb_asset_scratch_a10	/RVfeb_asset_scratch_a9	/RVfeb_asset_scratch_a8
398	/RVmar_asset_scratch_a11	/RVmar_asset_scratch_a10	/RVmar_asset_scratch_a9
399	/RVapr_asset_scratch_a12	/RVapr_asset_scratch_a11	/RVapr_asset_scratch_a10
400	/RVmay_asset_scratch_a1	/RVmay_asset_scratch_a12	/RVmay_asset_scratch_a11
401	/RVjun_asset_scratch_a2	/RVjun_asset_scratch_a1	/RVjun_asset_scratch_a12
402	/RVjul_asset_scratch_a3	/RVjul_asset_scratch_a2	/RVjul_asset_scratch_a1
403	/RVaug_asset_scratch_a4	/RVaug_asset_scratch_a3	/RVaug_asset_scratch_a2
404	/RVsep_asset_scratch_a5	/RVsep_asset_scratch_a4	/RVsep_asset_scratch_a3
405	/RVoct_asset_scratch_a6	/RVoct_asset_scratch_a5	/RVoct_asset_scratch_a4
406	/RVnov_asset_scratch_a7	/RVnov_asset_scratch_a6	/RVnov_asset_scratch_a5
407	/RVdec_asset_scratch_a8	/RVdec_asset_scratch_a7	/RVdec_asset_scratch_a6
408	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
409	XMAY APR	XJUN MAY	XJUL JUN
410	OTPASSET TURNOVER	OTPASSET TURNOVER	OTPASSET TURNOVER
411	TSMay through April	TSJune through May	TSJuly through June
412	TXMonth	TXMonth	TXMonth
413	TYPercent	TYPercent	TYPercent
414	{BSC}VQ	{BSC}VQ	{BSC}VQ
415	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}
416			
417			
418			
419	OCT	NOV	DEC
420	View a plot for November through	View a plot for December through	VIEW GRAPB FOR JANUARY THROUGH
421	/RUscratch_area	/RUscratch_area	/RUscratch_area
422	/RVjan_asset_scratch_a3	/RVjan_asset_scratch_a2	/RVjan_asset_scratch_a1
423	/RVfeb_asset_scratch_a4	/RVfeb_asset_scratch_a3	/RVfeb_asset_scratch_a2
424	/RVmar_asset_scratch_a5	/RVmar_asset_scratch_a4	/RVmar_asset_scratch_a3
425	/RVapr_asset_scratch_a6	/RVapr_asset_scratch_a5	/RVapr_asset_scratch_a4
426	/RVmay_asset_scratch_a7	/RVmay_asset_scratch_a6	/RVmay_asset_scratch_a5
427	/RVjun_asset_scratch_a8	/RVjun_asset_scratch_a7	/RVjun_asset_scratch_a6
428	/RVjul_asset_scratch_a9	/RVjul_asset_scratch_a8	/RVjul_asset_scratch_a7
429	/RVaug_asset_scratch_a10	/RVaug_asset_scratch_a9	/RVaug_asset_scratch_a8
430	/RVsep_asset_scratch_a11	/RVsep_asset_scratch_a10	/RVsep_asset_scratch_a9
431	/RVoct_asset_scratch_a12	/RVoct_asset_scratch_a11	/RVoct_asset_scratch_a10
432	/RVnov_asset_scratch_a1	/RVnov_asset_scratch_a12	/RVnov_asset_scratch_a11
433	/RVdec_asset_scratch_a2	/RVdec_asset_scratch_a1	/RVdec_asset_scratch_a12
434	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
435	XNOV OCT	XDEC NOV	XJAN DEC
436	OTPASSET TURNOVER	OTPASSET TURNOVER	OTPASSET TURNOVER
437	TSNovember through October	TSDecember through November	TSJanuary through December
438	TXMonth	TXMonth	TXMonth

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369 DECEMBER  
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C	A	B	C	D
439		TYPercent*	TYPercent*	TYPercent*
440		{ESC}VQ	{ESC}VQ	{ESC}VQ
441		{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}
442				
443				
444	MONTH7	JAN	PBB	MAR
445		View a plot for February through	View a plot for March through	View a plot for April through
446		/RUscratch_area	/RUscratch_area	/RUscratch_area
447		/RVjan_gross_scratch_a12*	/RVjan_gross_scratch_a11*	/RVjan_gross_scratch_a10*
448		/RVfeb_gross_scratch_a1*	/RVfeb_gross_scratch_a12*	/RVfeb_gross_scratch_a11*
449		/RVmar_gross_scratch_a2*	/RVmar_gross_scratch_a1*	/RVmar_gross_scratch_a12*
450		/RVapr_gross_scratch_a3*	/RVapr_gross_scratch_a2*	/RVapr_gross_scratch_a1*
451		/RVmay_gross_scratch_a4*	/RVmay_gross_scratch_a3*	/RVmay_gross_scratch_a2*
452		/RVjun_gross_scratch_a5*	/RVjun_gross_scratch_a4*	/RVjun_gross_scratch_a3*
453		/RVjul_gross_scratch_a6*	/RVjul_gross_scratch_a5*	/RVjul_gross_scratch_a4*
454		/RVaug_gross_scratch_a7*	/RVaug_gross_scratch_a6*	/RVaug_gross_scratch_a5*
455		/RVsep_gross_scratch_a8*	/RVsep_gross_scratch_a7*	/RVsep_gross_scratch_a6*
456		/RVoct_gross_scratch_a9*	/RVoct_gross_scratch_a8*	/RVoct_gross_scratch_a7*
457		/RVnov_gross_scratch_a10*	/RVnov_gross_scratch_a9*	/RVnov_gross_scratch_a8*
458		/RVdec_gross_scratch_a11*	/RVdec_gross_scratch_a10*	/RVdec_gross_scratch_a9*
459		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
460		XPBB JAN	XPBB PBB	XPBB MAR
461		OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*
462		TSPebruary through January	TSMarch through February	TSApril through March
463		TXMonth	TXMonth	TXMonth
464		TYPercent*	TYPercent*	TYPercent*
465		{ESC}VQ	{ESC}VQ	{ESC}VQ
466		{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}
467				
468				
469				
470	MONTH8	JUL	AUG	SEP
471		View a plot for August through	View a plot for September through	View a plot for October through
472		/RUscratch_area	/RUscratch_area	/RUscratch_area
473		/RVjan_gross_scratch_a6*	/RVjan_gross_scratch_a5*	/RVjan_gross_scratch_a4*
474		/RVfeb_gross_scratch_a7*	/RVfeb_gross_scratch_a6*	/RVfeb_gross_scratch_a5*
475		/RVmar_gross_scratch_a8*	/RVmar_gross_scratch_a7*	/RVmar_gross_scratch_a6*
476		/RVapr_gross_scratch_a9*	/RVapr_gross_scratch_a8*	/RVapr_gross_scratch_a7*
477		/RVmay_gross_scratch_a10*	/RVmay_gross_scratch_a9*	/RVmay_gross_scratch_a8*
478		/RVjun_gross_scratch_a11*	/RVjun_gross_scratch_a10*	/RVjun_gross_scratch_a9*
479		/RVjul_gross_scratch_a12*	/RVjul_gross_scratch_a11*	/RVjul_gross_scratch_a10*
480		/RVaug_gross_scratch_a1*	/RVaug_gross_scratch_a12*	/RVaug_gross_scratch_a11*
481		/RVsep_gross_scratch_a2*	/RVsep_gross_scratch_a1*	/RVsep_gross_scratch_a12*
482		/RVoct_gross_scratch_a3*	/RVoct_gross_scratch_a2*	/RVoct_gross_scratch_a1*
483		/RVnov_gross_scratch_a4*	/RVnov_gross_scratch_a3*	/RVnov_gross_scratch_a2*
484		/RVdec_gross_scratch_a5*	/RVdec_gross_scratch_a4*	/RVdec_gross_scratch_a3*
485		/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
486		XAUG JUL	XSEP AUG	XOCT SEP
487		OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*
488		TSAugust through July	TSSeptember through August	TSOctober through September
489		TXMonth	TXMonth	TXMonth
490		TYPercent*	TYPercent*	TYPercent*
491		{ESC}VQ	{ESC}VQ	{ESC}VQ
492		{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}	{ESC}_2_VUPLLOT}
493				
494				
495	PBB_JAN	Feb	Mar	Apr
496				
497	MAR_PBB	Mar	Apr	May
498				
499	APR_MAR	Apr	May	Jun
500				
501	MAY_APR	May	Jun	Jul
502				
503	JUN_MAY	Jun	Jul	Aug
504				
505	JUL_JUN	Jul	Aug	Sep
506				
507	AUG_JUL	Aug	Sep	Oct
508				
509	SEP_AUG	Sep	Oct	Nov
510				
511	OCT_SEP	Oct	Nov	Dec



C	B	P	G
439	TYPercent*	TYPercent*	TYPercent*
440	{BSC}VQ	{BSC}VQ	{BSC}VQ
441	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}
442			
443			
444	APR	MAY	JUN
445	View a plot for May through April	View a plot for June through May	View a plot for July through June
446	/RUscratch_area	/RUscratch_area	/RUscratch_area
447	/RVjan_gross_scratch_a9*	/RVjan_gross_scratch_a8*	/RVjan_gross_scratch_a1*
448	/RVfeb_gross_scratch_a10*	/RVfeb_gross_scratch_a9*	/RVfeb_gross_scratch_a8*
449	/RVmar_gross_scratch_a11*	/RVmar_gross_scratch_a10*	/RVmar_gross_scratch_a9*
450	/RVapr_gross_scratch_a12*	/RVapr_gross_scratch_a11*	/RVapr_gross_scratch_a10*
451	/RVmay_gross_scratch_a1*	/RVmay_gross_scratch_a12*	/RVmay_gross_scratch_a11*
452	/RVjun_gross_scratch_a2*	/RVjun_gross_scratch_a1*	/RVjun_gross_scratch_a12*
453	/RVjul_gross_scratch_a3*	/RVjul_gross_scratch_a2*	/RVjul_gross_scratch_a1*
454	/RVaug_gross_scratch_a4*	/RVaug_gross_scratch_a3*	/RVaug_gross_scratch_a2*
455	/RVsep_gross_scratch_a5*	/RVsep_gross_scratch_a4*	/RVsep_gross_scratch_a3*
456	/RVoct_gross_scratch_a6*	/RVoct_gross_scratch_a5*	/RVoct_gross_scratch_a4*
457	/RVnov_gross_scratch_a7*	/RVnov_gross_scratch_a6*	/RVnov_gross_scratch_a5*
458	/RVdec_gross_scratch_a8*	/RVdec_gross_scratch_a7*	/RVdec_gross_scratch_a6*
459	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
460	XMAY APR	XJUN MAY	XJUL JUN
461	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*
462	TSMay through April	TSJune through May	TSJuly through June
463	TXMonth	TXMonth	TXMonth
464	TYPercent*	TYPercent*	TYPercent*
465	{BSC}VQ	{BSC}VQ	{BSC}VQ
466	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}
467			
468			
469			
470	OCT	NOV	DEC
471	View a plot for November through October	View a plot for December through November	VIEW GRAPE FOR JANUARY THROUGH
472	/RUscratch_area	/RUscratch_area	/RUscratch_area
473	/RVjan_gross_scratch_a3*	/RVjan_gross_scratch_a2*	/RVjan_gross_scratch_a1*
474	/RVfeb_gross_scratch_a4*	/RVfeb_gross_scratch_a3*	/RVfeb_gross_scratch_a2*
475	/RVmar_gross_scratch_a5*	/RVmar_gross_scratch_a4*	/RVmar_gross_scratch_a3*
476	/RVapr_gross_scratch_a6*	/RVapr_gross_scratch_a5*	/RVapr_gross_scratch_a4*
477	/RVmay_gross_scratch_a7*	/RVmay_gross_scratch_a6*	/RVmay_gross_scratch_a5*
478	/RVjun_gross_scratch_a8*	/RVjun_gross_scratch_a7*	/RVjun_gross_scratch_a6*
479	/RVjul_gross_scratch_a9*	/RVjul_gross_scratch_a8*	/RVjul_gross_scratch_a7*
480	/RVaug_gross_scratch_a10*	/RVaug_gross_scratch_a9*	/RVaug_gross_scratch_a8*
481	/RVsep_gross_scratch_a11*	/RVsep_gross_scratch_a10*	/RVsep_gross_scratch_a9*
482	/RVoct_gross_scratch_a12*	/RVoct_gross_scratch_a11*	/RVoct_gross_scratch_a10*
483	/RVnov_gross_scratch_a1*	/RVnov_gross_scratch_a12*	/RVnov_gross_scratch_a11*
484	/RVdec_gross_scratch_a2*	/RVdec_gross_scratch_a1*	/RVdec_gross_scratch_a12*
485	/GRGTBAScratch_area	/GRGTBAScratch_area	/GRGTBAScratch_area
486	XNOV OCT	XDEC NOV	XJAN DEC
487	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*	OTPGROSS MARGIN ON SALES*
488	TSNovember through October	TSDecember through November	TSJanuary through December
489	TXMonth	TXMonth	TXMonth
490	TYPercent*	TYPercent*	TYPercent*
491	{BSC}VQ	{BSC}VQ	{BSC}VQ
492	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}	{BSC_2_VUPL0T}
493			
494			
495	May	Jun	Jul
496			
497	Jun	Jul	Aug
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499	Jul	Aug	Sep
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501	Aug	Sep	Oct
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503	Sep	Oct	Nov
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505	Oct	Nov	Dec
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507	Nov	Dec	Jan
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509	Dec	Jan	Feb
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515	DEC_NOV	Dec	Jan	Feb
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517	JAN_DEC	Jan	Feb	Mar
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521	FILE	SAVE & REPLACE	SAVE TO NEW FILE	QUIT WITHOUT SAVING
522		Replace the file on disk with	Save the current file in memory	Exit SBDSS without saving changes
523		{GOTO}blank_area	{GOTO}blank_area	{GOTO}quit_msg
524		/PS^R{GOTO}note	/PS{?}{?}	{GOTO}quit_corner^/Q
525		{PRAMBOPF}	{GOTO}note	
526		{GOTO}note_corner	{PRAMBOPF}	
527		WAIT @NOW+@TIME(0,0,5)}	{GOTO}note_corner	
528		{ESC_2_MENU}	WAIT @NOW+@TIME(0,0,5)}	
529			{ESC_2_MENU}	
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531	\R	{RESTART}		
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534	RESTART	{PRAMBOPF}		
535		{GOTO}screen		
536		{GOTO}screen_corner		
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538		{ESC_2_MENU}		
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## **APPENDIX B**

Appendix B contains the range names used in the SBDSS file. The range names were printed using Lotus 1-2-3's own printing function. They are displayed exactly as they appear in Spreadsheet D. Each range name is accompanied by its associated cell references and description. Due to the limitations of Lotus 1-2-3's printing function, some of the range name descriptions are truncated. This is indicated by a black dot at the right hand of the description. The complete description is visible in Spreadsheet D.

APRIL	A:V1..A:AA304	Contains the financial statements for April.
APR ACCTPAY	A:Y140..A:Y140	Balance of accounts payable for April.
APR ACCTRCVBL	A:Y122..A:Y122	Balance of accounts receivable for April.
APR ADVERTISE	A:Y33..A:Y33	Advertising expenses for April.
APR ASSET	A:Y291..A:Y291	The performance measure Asset Turnover Ratio for April.
APR BANK	A:Y121..A:Y121	Balance in bank accounts for April.
APR BUILDING	A:Y131..A:Y131	Original cost of buildings owned by end of April.
APR CAPSTOCK	A:Y147..A:Y147	Original cost of capital stock owned at end of April.
APR CASH	A:Y120..A:Y120	Cash on hand for April.
APR CONSUMABLE	A:Y125..A:Y125	Original cost of consumable supplies on hand at end of April.
APR CUSTOMS	A:Y18..A:Y18	Customs expenses for April.
APR DATA	A:V337..A:V337	Copy of the data entry form for April.
APR DATBLNKS	A:Y344..A:Y417	The data inputted for April and located in APR_DATA.
APR DVDS	A:Z66..A:Z66	Dividends paid in April.
APR EXHIBIT	A:Y34..A:Y34	Exhibition expenses for April.
APR FREIGHT	A:Y19..A:Y19	Freight expenses for April.
APR FURNITURE	A:Y130..A:Y130	Original cost of office furniture owned at end of April.
APR GROSS	A:Y293..A:Y293	The performance measure % Gross Margin on Sales for April.
APR INTAX	A:AA50..A:AA50	Income tax expense for April.
APR INTEREST	A:Z11..A:Z11	Interest earned in April.
APR INTEXP	A:Y42..A:Y42	Interest expense in April.
APR INVENTORY	A:Z24..A:Z24	End of the month inventory for April.
APR ISSCAPSTK	A:Z248..A:Z248	Proceeds from issuing capital stock in April.
APR LONGDEBT	A:Z145..A:Z145	Amount of long term debt at end of April.
APR MAR	C:B499..C:M499	Contains labels for Apr-Mar plots.
APR MARGIN	A:Y287..A:Y287	The performance measure Margin % for April.
APR MONTH	A:X3..A:X3	Date used in heading of income statement for April.
APR NOTESPAY	A:Y142..A:Y142	Balance of notes payable for April.
APR OFFEQUIP	A:Y129..A:Y129	Original cost of office equipment owned at end of April
APR OTHER	A:Y43..A:Y43	Other expenses not listed for April.
APR PREEXP	A:Y123..A:Y123	Balance of prepaid expenses for April.
APR PURCHASES	A:Y17..A:Y17	Cost of purchases for inventory in April.
APR RETURN	A:Y289..A:Y289	The performance measure Return on Capital for April.
APR SALARIES	A:Y39..A:Y39	Offices salaries paid in April.
APR SALES	A:Z7..A:Z7	Revenue from sales for April.
APR SELLEXP	A:Z31..A:Z31	Expenses associated with selling for April.
APR SEMINARS	A:Y35..A:Y35	Expenses associated with seminars for April.
APR SHORTBORROW	A:Z247..A:Z247	Proceeds from short term borrowing in April.
APR SHORTEBT	A:Z250..A:Z250	Payment made on short term debt for April.
APR STAX	A:Z8..A:Z8	Sales tax paid on inventory purchases for April.
APR TAXPAY	A:Y141..A:Y141	Balance of income taxes payable for April.
APR TRAVEL	A:Y41..A:Y41	Travel expenses for April.
APR UTILITIES	A:Y40..A:Y40	Utilities expenses in April.
AUGUST	A:AX1..A:BC304	The financial statements for August.
AUG ACCTPAY	A:BA140..A:BA140	Balance of accounts payable for August.
AUG ACCTRCVBL	A:BA122..A:BA122	Balance of accounts receivable for August.
AUG ADVERTISE	A:BA33..A:BA33	Advertising expenses in August.
AUG ASSET	A:BA291..A:BA291	The performance measure Asset Turnover Ratio for August.
AUG BANK	A:BA121..A:BA121	The bank balance for August.
AUG BUILDING	A:BA131..A:BA131	Original cost of buildings owned at end August.
AUG CAPSTOCK	A:BA147..A:BA147	Original cost of capital stock owned by end of August.
AUG CASH	A:BA120..A:BA120	The balance of cash on hand in August.
AUG CONSUMABLE	A:BA125..A:BA125	Original cost of consumable supplies on hand at end of August.
AUG CUSTOMS	A:BA18..A:BA18	Customs expenses in August.
AUG DATA	A:AX337..A:AX337	Copy of the data entry form for August.
AUG DATBLNKS	A:BA344..A:BA417	The data inputted for August located in AUG_DATA.
AUG DVDS	A:BB66..A:BB66	Dividends paid in August.
AUG EXHIBIT	A:BA34..A:BA34	Exhibition expenses for August
AUG FREIGHT	A:BA19..A:BA19	Freight expenses for August.
AUG FURNITURE	A:BA130..A:BA130	Original cost of office furniture owned at end of August.
AUG GROSS	A:BA293..A:BA293	The performance measure % Gross Margin on Sales for August.
AUG INTAX	A:BC50..A:BC50	Income tax expense for August.
AUG INTEREST	A:BB11..A:BB11	Interest earned in August.
AUG INTEXP	A:BA42..A:BA42	Interest expense for August.

AUG INVENTORY	A:BB24..A:BB24	Cost of the end of the month inventory for August.
AUG ISSCAPSTK	A:BB248..A:BB248	Proceeds for issuing capital stock in August.
AUG JUL	C:B507..C:M507	Contains labels for Aug-Jul plots.
AUG LONGDEBT	A:BB145..A:BB145	Amount of long term debt at end of August.
AUG MARGIN	A:BA287..A:BA287	The performance measure Margin % for August.
AUG MONTH	A:AZ3..A:AZ3	Date used in heading of Income statement.
AUG NOTESPAY	A:BA142..A:BA142	Balance of notes payable for August.
AUG OFFEQUIP	A:BA129..A:BA129	Original cost of office equipment owned at end of August.
AUG OTHER	A:BA43..A:BA43	Other expenses not listed for August.
AUG PREEXP	A:BA123..A:BA123	Balance of prepaid expenses for August.
AUG PURCHASES	A:BA17..A:BA17	Cost of purchases for inventory in August.
AUG RETURN	A:BA289..A:BA289	The performance measure Return on Capital for August.
AUG SALARIES	A:BA39..A:BA39	Office salaries paid in August.
AUG SALES	A:BB7..A:BB7	Revenue from sales for August.
AUG SELLEXP	A:BB31..A:BB31	Expenses associated with selling for August.
AUG SEMINARS	A:BA35..A:BA35	Expenses associated with seminars for August.
AUG SHORTBORROW	A:BB247..A:BB247	Proceeds from short term borrowing in August.
AUG SHORTDEBT	A:BB250..A:BB250	Payment made on short term debt for August.
AUG STAX	A:BB8..A:BB8	Sales tax paid on inventory purchases in August.
AUG TAXPAY	A:BA141..A:BA141	Balance of income taxes payable for August.
AUG TRAVEL	A:BA41..A:BA41	Expenses associated with travel in August.
AUG UTILITIES	A:BA40..A:BA40	Expenses for utilities in August.
BANK BALANCE	B:I52..B:I52	Contains the formula used to determine the total bank balance on the
BANNER	C:A543..C:D562	Opening screen
BANNER CORNER	C:A562..C:A562	Lower left corner of opening screen
BLANK AREA	C:P29..C:P29	Blank area on worksheet. Used when quitting program.
DATA ENTRY	B:A1..B:E94	This is the data entry form in worksheet B.
DATA INPUT	C:B28..C:B28	MENU FOR DATA INPUT
DATBLNKS	B:D8..B:D87	Column containing inputted data on data entry form.
DATBLNKS_1	B:D8..B:D8	This is the first data element in the data entry form (Date).
DATBLNKS_10	B:D26..B:D26	Tenth data element in the data entry form (Advertising expenses).
DATBLNKS_11	B:D28..B:D28	Eleventh data element in data entry form (Exhibition expenses).
DATBLNKS_12	B:D30..B:D30	Twelfth data element in data entry form (Seminar expenses).
DATBLNKS_13	B:D32..B:D32	Thirteenth data element in data entry form (Office salaries).
DATBLNKS_14	B:D34..B:D34	Fourteenth data element in data entry form (Utility expenses).
DATBLNKS_15	B:D36..B:D36	Fifteenth data element in data entry form (Travel expenses).
DATBLNKS_16	B:D38..B:D38	Sixteenth data element in data entry form (Interest expenses).
DATBLNKS_17	B:D40..B:D40	Seventh data element in data entry form (Income tax expense).
DATBLNKS_18	B:D42..B:D42	Eighteenth data element in data entry form (Other expenses).
DATBLNKS_19	B:D44..B:D44	Nineteenth data element in data entry form (Dividends paid).
DATBLNKS_2	B:D10..B:D10	Second data element in data entry form (Sales).
DATBLNKS_20	B:D46..B:D46	Twentieth data element in data entry form (Cash on hand).
DATBLNKS_21	B:D52..B:D52	Twenty-first data element in data entry form (Bank account balances).
DATBLNKS_22	B:D55..B:D55	Twenty-second data element in data entry form (Balance of accounts).
DATBLNKS_23	B:D57..B:D57	Twenty-third data element in data entry form (Prepaid expenses).
DATBLNKS_24	B:D59..B:D59	Twenty-fourth data element in data entry form (Cost of consumable).
DATBLNKS_25	B:D61..B:D61	Twenty-fifth data element in data entry form (Cost of office equipment).
DATBLNKS_26	B:D63..B:D63	Twenty-sixth data element in data entry form (Cost of furniture owned).
DATBLNKS_27	B:D65..B:D65	Twenty-seventh data element in data entry form (Cost of building).
DATBLNKS_28	B:D67..B:D67	Twenty-eighth data element in data entry form (Balance of accounts).
DATBLNKS_29	B:D69..B:D69	Twenty-ninth data element in data entry form (Income taxes payable).
DATBLNKS_3	B:D12..B:D12	Third data element in data entry form (Sales tax).
DATBLNKS_30	B:D76..B:D76	Thirtieth data element in data entry form (Notes payable).
DATBLNKS_31	B:D79..B:D79	Thirty-first data element in data entry form (Long term debt).
DATBLNKS_32	B:D81..B:D81	Thirty-second data element in data entry form (Capital stock).
DATBLNKS_33	B:D83..B:D83	Thirty-third data element in data entry form (Proceeds from short term).
DATBLNKS_34	B:D85..B:D85	Thirty-fourth data element in data entry form (Proceeds from issuing).
DATBLNKS_35	B:D87..B:D87	Thirty-fifth data element in data entry form (Payments on short term).
DATBLNKS_4	B:D14..B:D14	Fourth data element in data entry form (Interest earned).
DATBLNKS_5	B:D16..B:D16	Fifth data element in data entry form (Purchases for inventory).
DATBLNKS_6	B:D18..B:D18	Sixth data element in data element form (Customs on purchases).
DATBLNKS_7	B:D20..B:D20	Seventh data element in data entry form (Freight on purchases).
DATBLNKS_8	B:D22..B:D22	Eighth data element in data entry form (Inventory, end of month).
DATBLNKS_9	B:D24..B:D24	Ninth data element in data entry form (Selling expenses).



DECEMBER	A:BZ1..A:CE304	Contains the financial reports for December.
DEC ACCTPAY	A:CC140..A:CC140	Balance of accounts payable for December.
DEC ACCTRCVBL	A:CC122..A:CC122	Balance of accounts receivable for December.
DEC ADVERTISE	A:CC33..A:CC33	Advertising expenses for December.
DEC ASSET	A:CC291..A:CC291	The performance measure Asset Turnover Ratio for December.
DEC BANK	A:CC121..A:CC121	Balance in bank accounts for December.
DEC BUILDING	A:CC131..A:CC131	Original cost of buildings owned by end of December.
DEC CAPSTOCK	A:CC147..A:CC147	Original cost of capital stock owned by end of December.
DEC CASH	A:CC120..A:CC120	Balance of cash on hand for December.
DEC CONSUMABLE	A:CC125..A:CC125	Original cost of consumable supplies on hand at end of December.
DEC CUSTOMS	A:CC18..A:CC18	Customs expenses for December.
DEC DATA	A:BZ337..A:BZ337	Copy of the data entry form for December.
DEC DATBLNES	A:CC344..A:CC417	The data inputted for December and located in the data entry form.
DEC DVDS	A:CD66..A:CD66	Dividends paid in December.
DEC EXHIBIT	A:CC34..A:CC34	Exhibition expenses for December.
DEC FREIGHT	A:CC19..A:CC19	Freight expenses for December.
DEC FURNITURE	A:CC130..A:CC130	Original cost of office furniture owned at end of December.
DEC GROSS	A:CC293..A:CC293	The performance measure % Gross Margin on Sales for December.
DEC INTAX	A:CE50..A:CE50	Income tax expenses for December.
DEC INTEREST	A:CD11..A:CD11	Interest earned in December.
DEC INTEXP	A:CC42..A:CC42	Interest expenses in December.
DEC INVENTORY	A:CD24..A:CD24	End of the month inventory for December.
DEC ISSCAPSTK	A:CD248..A:CD248	Proceeds from issuing capital in December.
DEC LONGDEBT	A:CD145..A:CD145	Amount of long term debt at end of December.
DEC MARGIN	A:CC287..A:CC287	The performance measure Margin % for December.
DEC MONTH	A:CB3..A:CB3	Date used in heading of income statement for December.
DEC NOTESPAY	A:CC142..A:CC142	Balance of notes payable for December.
DEC NOV	C:B515..C:M515	Contains labels for Dec-Nov plots.
DEC OFFEQUIP	A:CC129..A:CC129	Original cost of office equipment owned at end of December.
DEC OTHER	A:CC43..A:CC43	Other expenses not listed for December.
DEC PREEXP	A:CC123..A:CC123	Balance of prepaid expenses for December.
DEC PURCHASES	A:CC17..A:CC17	Cost of purchases for inventory in December.
DEC RETURN	A:CC289..A:CC289	The performance measure Return on Capital for December.
DEC SALARIES	A:CC39..A:CC39	Offices salaries paid in December.
DEC SALES	A:CD7..A:CD7	Revenue from sales for December.
DEC SELLEXP	A:CD31..A:CD31	Expenses associated with selling for December.
DEC SEMINARS	A:CC35..A:CC35	Expenses associated with seminars for December.
DEC SHORTBORROW	A:CD247..A:CD247	Proceeds from short term borrowing in December.
DEC SHORTDEBT	A:CD250..A:CD250	Payment made on short term debt for December.
DEC STAX	A:CD8..A:CD8	Sales tax paid on inventory purchases in December.
DEC TAXPAY	A:CC141..A:CC141	Balance of income taxes payable for December.
DEC TRAVEL	A:CC41..A:CC41	Travel expenses for December.
DEC UTILITIES	A:CC40..A:CC40	Utilities expenses in December.
ENTRY FORM	B:A1..B:E97	Names the entire Data Entry Form.
ESC2_DATA INPUT	C:B36..C:B36	Macro which allows user to escape back to Data_input menu from a sub
ESC 2 MENU	C:B22..C:B22	Macro which allows user to escape back to Main menu from a submenu.
ESC 2 PLOTS	C:B273..C:B273	Macro which lets user escape back to Plots menu from a submenu.
ESC 2 REPORTS	C:B243..C:B243	Macro which allows user to escape back to Reports menu from a submenu
ESC 2 VUPLLOT	C:B285..C:B285	Allows user to escape back to Vuplot menu from a submenu.
FEBRUARY	A:H1..A:M304	Contains the financial for February.
FEB ACCTPAY	A:K140..A:K140	Balance of accounts payable for February.
FEB ACCTRCVBL	A:K122..A:K122	Balance of accounts receivable for February.
FEB ADVERTISE	A:K33..A:K33	Advertising expenses for February.
FEB ASSET	A:K291..A:K291	The performance measure Asset Turnover Ratio for February.
FEB BANK	A:K121..A:K121	Balance in bank accounts for February.
FEB BUILDING	A:K131..A:K131	Original cost of buildings owned at end of February.
FEB CAPSTOCK	A:K147..A:K147	Original cost of capstock owned at end of February.
FEB CASH	A:K120..A:K120	Balance of cash on hand for February.
FEB CONSUMABLE	A:K125..A:K125	Original cost of consumable supplies on hand in February.
FEB CUSTOMS	A:K18..A:K18	Customs expenses for February.
FEB DATA	A:H337..A:H337	Copy of the data entry form for February.
FEB DATBLNES	A:K344..A:K417	The data inputted for February and located in FEB_DATA.
FEB DVDS	A:L66..A:L66	Dividends paid in February.
FEB_EXHIBIT	A:K34..A:K34	Exhibition expenses for February.



PEB_FREIGHT	A:K19..A:K19	Freight expenses for February.
PEB_FURNITURE	A:K130..A:K130	The original cost of office furniture owned at end of February.
PEB_GROSS	A:K293..A:K293	The performance measure % Gross Margin on Sales for February.
PEB_INTAX	A:M50..A:M50	Income tax expense for February.
PEB_INTEREST	A:L11..A:L11	Interest earned in February.
PEB_INTEXP	A:K42..A:K42	Interest expense in February.
PEB_INVENTORY	A:L24..A:L24	End of the month inventory for February.
PEB_ISSCAPSTK	A:L248..A:L248	Proceeds from issuing capital stock in February.
PEB_JAN	C:B495..C:M495	Contains labels for Feb-Jan plots.
PEB_LONGDEBT	A:L145..A:L145	Amount of long term debt at end of February.
PEB_MARGIN	A:K287..A:K287	The performance measure Margin % for February.
PEB_MONTH	A:J3..A:J3	Date used in heading of income statement for February.
PEB_NOTESPAY	A:K142..A:K142	Balance of notes payable for February.
PEB_OFFEQUIP	A:K129..A:K129	Original cost of office equipment owned at end of February.
PEB_OTHER	A:K43..A:K43	Other expenses not listed for February.
PEB_PREEXP	A:K123..A:K123	Balance of prepaid expenses for February.
PEB_PURCHASES	A:K17..A:K17	Cost of purchases for inventory in February.
PEB_RETURN	A:K289..A:K289	The performance measure Return on Capital for February.
PEB_SALARIES	A:K39..A:K39	Office salaries paid in February.
PEB_SALES	A:L7..A:L7	Revenue from sales for February.
PEB_SELLEXP	A:L31..A:L31	Expenses associated with selling in February.
PEB_SEMINARS	A:K35..A:K35	Expenses associated with seminars in February.
PEB_SHORTBORROW	A:L247..A:L247	Proceeds from short term borrowing in February.
PEB_SHORTDEBT	A:L250..A:L250	Payment on short term debt in February.
PEB_STAX	A:L8..A:L8	Sales tax paid on inventory purchased in February.
PEB_TAXPAY	A:K141..A:K141	Balance of taxes payable for February.
PEB_TRAVEL	A:K41..A:K41	Travel expenses for February.
PEB_UTILITIES	A:K40..A:K40	Utilities expenses for February.
FILE	C:B521..C:B521	MENU FOR SAVING FILES
JANUARY	A:A1..A:P304	Contains the financial reports for January.
JAN_ACCTPAY	A:D140..A:D140	Balance of accounts payable for January.
JAN_ACCTRCVBL	A:D122..A:D122	Balance of accounts receivable for January.
JAN_ADVERTISE	A:D33..A:D33	Advertising expenses for January.
JAN_ASSET	A:D291..A:D291	The performance measure Asset Turnover Ratio for January.
JAN_BANK	A:D121..A:D121	Balance in bank accounts for January.
JAN_BUILDING	A:D131..A:D131	Original cost of buildings owned at end of January.
JAN_CAPSTOCK	A:D147..A:D147	Original cost of capital stock owned at end of January.
JAN_CASH	A:D120..A:D120	Balance of cash on hand for January.
JAN_CONSUMABLE	A:D125..A:D125	Original cost of consumable supplies on hand in January.
JAN_CUSTOMS	A:D18..A:D18	Customs expenses for January.
JAN_DATA	A:A337..A:A337	Copy of the data entry form for January.
JAN_DATBLNKS	A:D344..A:D417	The data inputted for January and located in JAN_DATA.
JAN_DEC	C:B517..C:M517	Contains labels for Jan-Dec plots.
JAN_DVDS	A:E66..A:E66	Dividends paid in January.
JAN_EXHIBIT	A:D34..A:D34	Exhibition expenses for January.
JAN_FREIGHT	A:D19..A:D19	Freight expenses for January.
JAN_FURNITURE	A:D130..A:D130	The original cost of office furniture owned at end of January.
JAN_GROSS	A:D293..A:D293	The performance measure % Gross Margin on Sales for January.
JAN_INTAX	A:P50..A:P50	Income tax expense for January.
JAN_INTEREST	A:E11..A:E11	Interest earned in January.
JAN_INTEXP	A:D42..A:D42	Interest expense in January.
JAN_INVENTORY	A:E24..A:E24	End of the month inventory for January.
JAN_ISSCAPSTK	A:E248..A:E248	Proceeds from issuing capital stock in January.
JAN_LONGDEBT	A:E145..A:E145	Amount of long term debt at end of January.
JAN_MARGIN	A:D287..A:D287	The performance measure Margin % for January.
JAN_MONTH	A:C3..A:C3	Date used in heading of income statement for January.
JAN_NOTESPAY	A:D142..A:D142	Balance of notes payable for January.
JAN_OFFEQUIP	A:D129..A:D129	Original cost of office equipment owned at end of January.
JAN_OTHER	A:D43..A:D43	Other expenses not listed for January.
JAN_PREEXP	A:D123..A:D123	Balance of prepaid expenses for January.
JAN_PURCHASES	A:D17..A:D17	Cost of purchases for inventory in January.
JAN_RETURN	A:D289..A:D289	The performance measure Return on Capital for January.
JAN_SALARIES	A:D39..A:D39	Office salaries paid in January.
JAN_SALES	A:E7..A:E7	Revenue from sales for January.

JAN_SBLLEXP	A:E31..A:E31	Expenses associated with selling in January.
JAN_SEMINARS	A:D35..A:D35	Expenses associated with seminars in January.
JAN_SHORTBORROW	A:E247..A:E247	Proceeds from short term borrowing in January.
JAN_SHORTDEBT	A:E250..A:E250	Payment made on short term debt in January.
JAN_STAX	A:E8..A:E8	Sales tax paid on inventory purchased in January.
JAN_TAXPAY	A:D141..A:D141	Balance of taxes payable for January.
JAN_TRAVEL	A:D41..A:D41	Travel expenses for January.
JAN_UTILITIES	A:D40..A:D40	Utilities expenses for January.
JULY	A:AQ1..A:AV304	Contains the financial reports for July.
JUL_ACCTPAY	A:AT140..A:AT140	Balance of accounts payable for July.
JUL_ACCTRCVBL	A:AT122..A:AT122	Balance of accounts receivable for July.
JUL_ADVERTISE	A:AT33..A:AT33	Advertising expenses for July.
JUL_ASSET	A:AT291..A:AT291	The performance measure Asset Turnover Ratio for July.
JUL_BANK	A:AT121..A:AT121	Balance in bank accounts for July.
JUL_BUILDING	A:AT131..A:AT131	Original cost of buildings owned at end of July.
JUL_CAPSTOCK	A:AT147..A:AT147	Original cost of capital stock owned at end of July.
JUL_CASH	A:AT120..A:AT120	Balance of cash on hand for July.
JUL_CONSUMABLE	A:AT125..A:AT125	Original cost of consumable supplies on hand in July.
JUL_CUSTOMS	A:AT18..A:AT18	Customs expenses for July.
JUL_DATA	A:AQ337..A:AQ337	Copy of the data entry form for July.
JUL_DATBLNKS	A:AT344..A:AT417	The data inputted for July and located in JUL_DATA
JUL_DVDS	A:AU66..A:AU66	Dividends paid in July.
JUL_EXHIBIT	A:AT34..A:AT34	Exhibition expenses for July.
JUL_FREIGHT	A:AT19..A:AT19	Freight expenses for July.
JUL_FURNITURE	A:AT130..A:AT130	Original cost of office furniture owned at end of July.
JUL_GROSS	A:AT293..A:AT293	The performance measure % Gross Margin on Sales for July.
JUL_INTAX	A:AV50..A:AV50	Income tax expense for July.
JUL_INTEREST	A:AU11..A:AU11	Interest earned in July.
JUL_INTEXP	A:AT42..A:AT42	Interest expense in July.
JUL_INVENTORY	A:AU24..A:AU24	End of the month inventory for July.
JUL_ISSCAPSTK	A:AU248..A:AU248	Proceeds from issuing capital stock in July.
JUL_JUN	C:B505..C:M505	Contains labels for Jul-Jun plots.
JUL_LONGDEBT	A:AU145..A:AU145	Amount of long term debt at end of July.
JUL_MARGIN	A:AT287..A:AT287	The performance measure Margin % for July.
JUL_MONTH	A:AS3..A:AS3	Date used in heading of income statement for July.
JUL_NOTESPAY	A:AT142..A:AT142	Balance of notes payable for July.
JUL_OFFEQUIP	A:AT129..A:AT129	Original cost of office equipment owned at end of July.
JUL_OTHER	A:AT43..A:AT43	Other expenses not listed for July.
JUL_PREEXP	A:AT123..A:AT123	Balance of prepaid expenses for July.
JUL_PURCHASES	A:AT17..A:AT17	Cost of purchases for inventory in July.
JUL_RETURN	A:AT289..A:AT289	The performance measure Return on Capital for July.
JUL_SALARIES	A:AT39..A:AT39	Office salaries paid in July.
JUL_SALES	A:AU7..A:AU7	Revenue from sales for July.
JUL_SBLLEXP	A:AU31..A:AU31	Expenses associated with selling in July.
JUL_SEMINARS	A:AT35..A:AT35	Expenses associated with seminars in July.
JUL_SHORTBORROW	A:AU247..A:AU247	Proceeds from short term borrowing in July.
JUL_SHORTDEBT	A:AU250..A:AU250	Payment made on short term debt in July.
JUL_STAX	A:AU8..A:AU8	Sales tax on inventory purchased in July.
JUL_TAXPAY	A:AT141..A:AT141	Balance of taxes payable for July.
JUL_TRAVEL	A:AT41..A:AT41	Travel expenses for July.
JUL_UTILITIES	A:AT40..A:AT40	Utilities expenses for July.
JUNE	A:AJ1..A:A0304	Contains the financial reports for June.
JUN_ACCTPAY	A:AM140..A:AM140	Balance of accounts payable for June.
JUN_ACCTRCVBL	A:AM122..A:AM122	Balance of accounts receivable for June.
JUN_ADVERTISE	A:AM33..A:AM33	Advertising expenses for June.
JUN_ASSET	A:AM291..A:AM291	The performance measure Asset Turnover Ratio for June.
JUN_BANK	A:AM121..A:AM121	Balance in bank accounts for June.
JUN_BUILDING	A:AM131..A:AM131	Original cost of buildings owned at end of June.
JUN_CAPSTOCK	A:AM147..A:AM147	Original cost of capital stock owned by end of June.
JUN_CASH	A:AM120..A:AM120	Balance of cash on hand for June.
JUN_CONSUMABLE	A:AM125..A:AM125	Original cost of consumable supplies on hand in June.
JUN_CUSTOMS	A:AM18..A:AM18	Customs expenses for June.
JUN_DATA	A:AJ337..A:AJ337	Copy of the data entry form for June.
JUN_DATBLNKS	A:AM344..A:AM417	The data inputted for June and located in JUN_DATA.

JUN_DVDS	A:AN66..A:AN66	Dividends paid in June.
JUN_EXHIBIT	A:AM34..A:AM34	Exhibition expenses for June.
JUN_FREIGHT	A:AM19..A:AM19	Freight expenses for June.
JUN_FURNITURE	A:AM130..A:AM130	Original cost of office furniture owned at end of June.
JUN_GROSS	A:AM293..A:AM293	The performance measure % Gross Margin on Sales for June.
JUN_INTAX	A:A050..A:A050	Income tax expense for June.
JUN_INTEREST	A:AN11..A:AN11	Interest earned in June.
JUN_INTEXP	A:AM42..A:AM42	Interest expense in June.
JUN_INVENTORY	A:AN24..A:AN24	End of the month inventory for June.
JUN_ISSCAPSTK	A:AN248..A:AN248	Proceeds from issuing capital stock in June.
JUN_LONGDEBT	A:AN145..A:AN145	Amount of long term debt at end of June.
JUN_MARGIN	A:AM287..A:AM287	The performance measure Margin % for June.
JUN_MAY	C:B503..C:M503	Contains labels for Jun-May plots.
JUN_MONTH	A:AL3..A:AL3	Date used in heading of income statement for June.
JUN_NOTESPAY	A:AM142..A:AM142	Balance of notes payable for June.
JUN_OFFEQUIP	A:AM129..A:AM129	Original cost of office equipment owned at end of June.
JUN_OTHER	A:AM43..A:AM43	Other expenses not listed for June.
JUN_PREEXP	A:AM123..A:AM123	Balance of prepaid expenses for June.
JUN_PURCHASES	A:AM17..A:AM17	Cost of purchases for inventory in June.
JUN_RETURN	A:AM289..A:AM289	The performance measure Return on Capital for June.
JUN_SALARIES	A:AM39..A:AM39	Office salaries paid in June.
JUN_SALES	A:AM7..A:AM7	Revenue from sales for June.
JUN_SELLEXP	A:AM31..A:AM31	Expenses associated with selling in June.
JUN_SEMINARS	A:AM35..A:AM35	Expenses associated with seminars in June.
JUN_SHORTBORROW	A:AM247..A:AM247	Proceeds from short term borrowing in June.
JUN_SHORTDEBT	A:AM250..A:AM250	Payment made on short term debt in June.
JUN_STAX	A:AN8..A:AN8	Sales tax on inventory purchased in June.
JUN_TAXPAY	A:AM141..A:AM141	Balance of taxes payable for June.
JUN_TRAVEL	A:AM41..A:AM41	Travel expenses for June.
JUN_UTILITIES	A:AM40..A:AM40	Utilities expenses for June.
MAIN	C:B8..C:B8	Macro which starts the application.
MARCH	A:O1..A:T304	Contains the financial reports for March.
MAR_ACCTPAY	A:R140..A:R140	Balance of accounts payable for March.
MAR_ACCTRCVBL	A:R122..A:R122	Balance of accounts receivable for March.
MAR_ADVERTISE	A:R33..A:R33	Advertising expenses for March.
MAR_ASSET	A:R291..A:R291	The performance ratio Asset Turnover Ratio for March.
MAR_BANK	A:R121..A:R121	Balance in bank accounts for March.
MAR_BUILDING	A:R131..A:R131	Original cost of buildings owned at end of March.
MAR_CAPSTOCK	A:R147..A:R147	Original cost of capital stock owned at end of March.
MAR_CASH	A:R120..A:R120	Balance of cash on hand for March.
MAR_CONSUMABLE	A:R125..A:R125	Original cost of consumable supplies on hand in March.
MAR_CUSTOMS	A:R18..A:R18	Customs expenses for March.
MAR_DATA	A:O337..A:O337	Copy of the data entry form for March.
MAR_DATBLNKS	A:R344..A:R417	The data inputted for March and located in MAR_DATA.
MAR_DVDS	A:S66..A:S66	Dividends paid in March.
MAR_EXHIBIT	A:R34..A:R34	Exhibition expenses for March.
MAR_FEB	C:B497..C:M497	Contains labels for Mar-Feb plots.
MAR_FREIGHT	A:R19..A:R19	Freight expenses for March.
MAR_FURNITURE	A:R130..A:R130	Original cost of office furniture owned at end of March.
MAR_GROSS	A:R293..A:R293	The performance measure % Gross Margin on Sales for March.
MAR_INTAX	A:T50..A:T50	Income tax expense for March.
MAR_INTEREST	A:S11..A:S11	Interest earned in March.
MAR_INTEXP	A:R42..A:R42	Interest expense in March.
MAR_INVENTORY	A:S24..A:S24	End of the month inventory for March.
MAR_ISSCAPSTK	A:S248..A:S248	Proceeds from issuing capital stock in March.
MAR_LONGDEBT	A:S145..A:S145	Amount of long term debt at end of March.
MAR_MARGIN	A:R287..A:R287	The performance measure Margin % for March.
MAR_MONTH	A:Q3..A:Q3	Date used in heading of income statement for March.
MAR_NOTESPAY	A:R142..A:R142	Balance of notes payable for March.
MAR_OFFEQUIP	A:R129..A:R129	Original cost of office equipment owned at end of March.
MAR_OTHER	A:R43..A:R43	Other expenses not listed for March.
MAR_PREEXP	A:R123..A:R123	Balance of prepaid expenses for March.
MAR_PURCHASES	A:R17..A:R17	Cost of purchases for inventory in March.
MAR_RETURN	A:R289..A:R289	The performance measure Return on Capital for March.



MAR_SALARIES	A:R39..A:R39	Office salaries paid in March.
MAR_SALES	A:S7..A:S7	Revenue from sales for March.
MAR_SELLEXP	A:S31..A:S31	Expenses associated with selling in March.
MAR_SEMINARS	A:R35..A:R35	Expenses associated with seminars in March.
MAR_SHORTBORROW	A:S247..A:S247	Proceeds from short term borrowing in March.
MAR_SHORTDEBT	A:S250..A:S250	Payment made on short term debt in March.
MAR_STAX	A:S8..A:S8	Sales tax paid on inventory purchased in March.
MAR_TAXPAY	A:R141..A:R141	Balance of taxes payable for March.
MAR_TRAVEL	A:R41..A:R41	Travel expenses for March.
MAR_UTILITIES	A:R40..A:R40	Utilities expenses for March.
MAY	A:AC1..A:AB331	Contains the financial reports for May.
MAY_ACCTPAY	A:AF140..A:AF140	Balance of accounts payable for May.
MAY_ACCTRCVBL	A:AF122..A:AF122	Balance of accounts receivable for May.
MAY_ADVERTISE	A:AF33..A:AF33	Advertising expenses for May.
MAY_APR	C:B501..C:M501	Contains labels for May-Apr plots.
MAY_ASSET	A:AF291..A:AF291	The performance measure Asset Turnover Ratio for May.
MAY_BANK	A:AF121..A:AF121	Balance in banks for May.
MAY_BUILDING	A:AF131..A:AF131	Original cost of buildings owned at end of May.
MAY_CAPSTOCK	A:AF147..A:AF147	Original cost of capital stock owned by end of May.
MAY_CASH	A:AF120..A:AF120	Balance of cash on hand for May.
MAY_CONSUMABLE	A:AF125..A:AF125	Original cost of consumable supplies on hand in May.
MAY_CUSTOMS	A:AF18..A:AF18	Customs expenses for May.
MAY_DATA	A:AC337..A:AC337	Copy of the data entry form for May.
MAY_DATBLNKS	A:AF344..A:AF417	The data inputted for May and located in MAY_DATA.
MAY_DVDS	A:AG66..A:AG66	Dividends paid in May.
MAY_EXHIBIT	A:AF34..A:AF34	Exhibition expenses for May.
MAY_FREIGHT	A:AF19..A:AF19	Freight expenses for May.
MAY_FURNITURE	A:AF130..A:AF130	Original cost of office furniture owned at end of May.
MAY_GROSS	A:AF293..A:AF293	The performance measure % Gross Margin on Sales for May.
MAY_INTAX	A:AH50..A:AH50	Income tax expense for May.
MAY_INTEREST	A:AG11..A:AG11	Interest earned in May.
MAY_INTEXP	A:AF42..A:AF42	Interest expense in May.
MAY_INVENTORY	A:AG24..A:AG24	End of the month inventory for May.
MAY_ISSCAPSTE	A:AG248..A:AG248	Proceeds from issuing capital stock in May.
MAY_LONGDEBT	A:AG145..A:AG145	Amount of long term debt at end of May.
MAY_MARGIN	A:AF287..A:AF287	The performance measure Margin % for May.
MAY_MONTH	A:AE3..A:AE3	Date used in heading of income statement for May.
MAY_NOTESPAY	A:AF142..A:AF142	Balance of notes payable for May.
MAY_OFFEQUIP	A:AF129..A:AF129	Original cost of office equipment owned at end of May.
MAY_OTHER	A:AF43..A:AF43	Other expenses not listed for May.
MAY_PREEXP	A:AF123..A:AF123	Balance of prepaid expenses for May.
MAY_PURCHASES	A:AF17..A:AF17	Cost of purchases for inventory in May.
MAY_RETURN	A:AF289..A:AF289	The performance measure Return on Capital for May.
MAY_SALARIES	A:AF39..A:AF39	Office salaries paid in May.
MAY_SALES	A:AG7..A:AG7	Revenue from sales for May.
MAY_SELLEXP	A:AG31..A:AG31	Expenses associated with selling in May.
MAY_SEMINARS	A:AF35..A:AF35	Expenses associated with seminars in May.
MAY_SHORTBORROW	A:AG247..A:AG247	Proceeds from short term borrowing in May.
MAY_SHORTDEBT	A:AG250..A:AG250	Payment made on short term debt in May.
MAY_STAX	A:AG8..A:AG8	Sales tax on inventory purchased in May.
MAY_TAXPAY	A:AF141..A:AF141	Balance of taxes payable for May.
MAY_TRAVEL	A:AF41..A:AF41	Travel expenses for May.
MAY_UTILITIES	A:AF40..A:AF40	Utilities expenses for May.
MENU	C:B17..C:B17	PRIMARY MENU
MONTH1	C:B294..C:B294	Menu for selecting plots of the margin percentage ending in Jan -
MONTH2	C:B318..C:B318	Menu for selecting plot of margin percentage ending in Jul- Dec.
MONTH3	C:B343..C:B343	Menu for selecting plot of return on capital ending in Jan-Jun.
MONTH4	C:B368..C:B368	Menu for selecting a plot of return on capital ending in Jul-Dec.
MONTH5	C:B393..C:B393	Menu for selecting a plot of asset turnover ratio ending in Jan-Ju-
MONTH6	C:B419..C:B419	Menu for selecting a plot of asset turnover ratio ending in Jul-Dec.
MONTH7	C:B444..C:B444	Menu for selecting a plot of % gross margin on sales for Jan-Jun.
MONTH8	C:B470..C:B470	Menu for selecting a plot of % gross margin on sale for Jul-Dec.
NOTE	C:A590..C:D609	Contains screen telling user that data has been successfully saved.
NOTES_PAYABLE	B:I76..B:I76	Contains the formula for determining total notes payable in the da-

NOTE CORNER	C:A609..C:A609	Lower left hand corner of NOTE.
NOVEMBER	A:BS1..A:BX304	Contains the financial reports for November.
NOV ACCTPAY	A:BV140..A:BV140	Balance of accounts payable for November.
NOV ACCTRCVBL	A:BV122..A:BV122	Balance of accounts receivable for November.
NOV ADVERTISE	A:BV33..A:BV33	Advertising expenses for November.
NOV ASSET	A:BV291..A:BV291	The performance measure Asset Turnover Ratio for November.
NOV BANK	A:BV121..A:BV121	Balance in bank accounts for November.
NOV BUILDING	A:BV131..A:BV131	Original cost of buildings owned at end of November.
NOV CAPSTOCK	A:BV147..A:BV147	Original cost of capital stock owned by end of November.
NOV CASH	A:BV120..A:BV120	Balance of cash on hand for November.
NOV CONSUMABLE	A:BV125..A:BV125	Original cost of consumable supplies on hand in November.
NOV CUSTOMS	A:BV18..A:BV18	Customs expenses for November.
NOV DATA	A:BS337..A:BS337	Copy of the data entry form for November.
NOV DATBLNKS	A:BV344..A:BV417	The inputted for November and located in NOV_DATA.
NOV DVDS	A:BW66..A:BW66	Dividends paid in November.
NOV EXHIBIT	A:BV34..A:BV34	Exhibition expenses for November.
NOV FREIGHT	A:BV19..A:BV19	Freight expenses for November.
NOV FURNITURE	A:BV130..A:BV130	Original cost of office furniture owned at end of November.
NOV GROSS	A:BV293..A:BV293	The performance measure % Gross Margin on Sales for November.
NOV INTAX	A:BX50..A:BX50	Income tax expense for November.
NOV INTEREST	A:BW11..A:BW11	Interest earned in November.
NOV INTEXP	A:BV42..A:BV42	Interest expense in November.
NOV INVENTORY	A:BW24..A:BW24	End of the month inventory for November.
NOV ISSCAPSTK	A:BW248..A:BW248	Proceeds from issuing capital stock in November.
NOV LONGDEBT	A:BW145..A:BW145	Amount of long term debt at end of November.
NOV MARGIN	A:BV287..A:BV287	The performance measure Margin % for November.
NOV MONTH	A:BU3..A:BU3	Date used in heading of income statement for November.
NOV NOTESPAY	A:BV142..A:BV142	Balance of notes payable for November.
NOV OCT	C:B513..C:M513	Contains labels for Nov-Oct plots.
NOV OFFEQUIP	A:BV129..A:BV129	Original cost of office equipment owned at end of November.
NOV OTHER	A:BV43..A:BV43	Other expenses not listed for November.
NOV PREEXP	A:BV123..A:BV123	Balance of prepaid expenses for November.
NOV PURCHASES	A:BV17..A:BV17	Cost of purchases for inventory in November.
NOV RBTURN	A:BV289..A:BV289	The performance measure Return on Capital for November.
NOV SALARIES	A:BV39..A:BV39	Office salaries paid in November.
NOV SALES	A:BW7..A:BW7	Revenue from sales for November.
NOV SELLEXP	A:BW31..A:BW31	Expenses associated with selling in November.
NOV SEMINARS	A:BV35..A:BV35	Expenses associated with seminars in November.
NOV SHORTBORROW	A:BW247..A:BW247	Proceeds from short term borrowing in November.
NOV SHORTDEBT	A:BW250..A:BW250	Payment made on short term debt in November.
NOV STAX	A:BW8..A:BW8	Sales tax paid on inventory purchased in November.
NOV TAXPAY	A:BV141..A:BV141	Balance of taxes payable for November.
NOV TRAVEL	A:BV41..A:BV41	Travel expenses for November.
NOV UTILITIES	A:BV40..A:BV40	Utilities expenses for November.
OCTOBER	A:BL1..A:BQ304	Contains the financial reports for October.
OCT ACCTPAY	A:BO140..A:BO140	Balance of accounts payable for October.
OCT ACCTRCVBL	A:BO122..A:BO122	Balance of accounts receivable for October.
OCT ADVERTISE	A:BO33..A:BO33	Advertising expenses for October.
OCT ASSET	A:BO291..A:BO291	The performance measure Asset Turnover Ratio for October.
OCT BANK	A:BO121..A:BO121	Balance in bank accounts for October.
OCT BUILDING	A:BO131..A:BO131	Original cost of buildings owned at end of October.
OCT CAPSTOCK	A:BO147..A:BO147	Original cost of capital stock owned at end of October.
OCT CASH	A:BO120..A:BO120	Balance of cash on hand for October.
OCT CONSUMABLE	A:BO125..A:BO125	Original cost of consumable supplies on hand in October.
OCT CUSTOMS	A:BO18..A:BO18	Customs expenses for October.
OCT DATA	A:BL337..A:BL337	Copy of the data entry form for October.
OCT DATBLNKS	A:BO344..A:BO417	The data inputted for October and located in OCT_DATA.
OCT DVDS	A:BP66..A:BP66	Dividends paid in October.
OCT EXHIBIT	A:BO34..A:BO34	Exhibition expenses for October.
OCT FREIGHT	A:BO19..A:BO19	Freight expenses for October.
OCT FURNITURE	A:BO130..A:BO130	Original cost of office furniture owned at end of October.
OCT GROSS	A:BO293..A:BO293	The performance measure % Gross Margin on Sales for October.
OCT INTAX	A:BQ50..A:BQ50	Income tax expense for October.
OCT INTEREST	A:BP11..A:BP11	Interest earned in October.

OCT_INTEXP	A:BO42..A:BO42	Interest expense in October.
OCT_INVENTORY	A:BP24..A:BP24	End of the month inventory for October.
OCT_ISSCAPSTK	A:BP248..A:BP248	Proceeds from issuing capital stock in October.
OCT_LONGDEBT	A:BP145..A:BP145	Amount of long term debt at end of October.
OCT_MARGIN	A:BO287..A:BO287	The performance measure Margin % for October.
OCT_MONTH	A:BN3..A:BN3	Date used in heading of income statement for October.
OCT_NOTESPAY	A:BO142..A:BO142	Balance of notes payable for October.
OCT_OFFEQUIP	A:BO129..A:BO129	Original cost of office equipment owned at end of October.
OCT_OTHER	A:BO43..A:BO43	Other expenses not list for October.
OCT_PREEXP	A:BO123..A:BO123	Balance of prepaid expenses for October.
OCT_PURCHASES	A:BO17..A:BO17	Cost of purchases for inventory in October.
OCT_RETURN	A:BO289..A:BO289	The performance measure Return on Capital for October.
OCT_SALARIES	A:BO39..A:BO39	Office salaries paid in October.
OCT_SALES	A:BP7..A:BP7	Revenue from sales for October.
OCT_SELEXP	A:BP31..A:BP31	Expenses associated with selling in October.
OCT_SEMINARS	A:BO35..A:BO35	Expenses associated with seminars in October.
OCT_SEP	C:B511..C:B511	Contains labels for Oct-Sep plots.
OCT_SHORTBORROW	A:BP247..A:BP247	Proceeds from short term borrowing in October.
OCT_SHORTDEBT	A:BP250..A:BP250	Payment made on short term debt in October.
OCT_STAX	A:BP8..A:BP8	Sales tax paid on inventory purchased in October.
OCT_TAXPAY	A:BO141..A:BO141	Balance of taxes payable for October.
OCT_TRAVEL	A:BO41..A:BO41	Travel expenses for October.
OCT_UTILITIES	A:BO40..A:BO40	Utilities expenses for October.
PLACE_DATA1	C:B42..C:G42	Menu for copying data from data entry form to financial reports fo
PLACE_DATA2	C:B86..C:G86	Menu for copying data from data entry form to financial reports fo
PLOTS	C:B268..C:B268	Menu for selecting which performance measure to plot.
PRINT_REPORTS1	C:B258..C:B258	Menu for printing financial reports for Jan-Jun.
PRINT_REPORTS2	C:B263..C:B263	Menu for printing reports for Jul-Dec.
QUIT_CORNER	C:A633..C:A633	Lower left hand corner of QUIT MSG.
QUIT_MSG	C:A614..C:D633	Screen which warns user of dangers of quitting.
REPORTS	C:B238..C:B238	Menu for selecting whether to view or print financial reports.
RESTART	C:B534..C:B534	Macro which is used to restart the application after leaving macro
SCRATCH_A1	C:B291..C:B291	First cell in range SCRATCH_AREA.
SCRATCH_A10	C:K291..C:K291	Tenth cell in range SCRATCH_AREA.
SCRATCH_A11	C:L291..C:L291	Eleventh cell in range SCRATCH_AREA.
SCRATCH_A12	C:M291..C:M291	Twelveth cell in range SCRATCH_AREA.
SCRATCH_A2	C:C291..C:C291	Second cell in range SCRATCH_AREA.
SCRATCH_A3	C:D291..C:D291	Third cell in range SCRATCH_AREA.
SCRATCH_A4	C:E291..C:E291	Fourth cell in range SCRATCH_AREA.
SCRATCH_A5	C:F291..C:F291	Fifth cell in range SCRATCH_AREA.
SCRATCH_A6	C:G291..C:G291	Sixth cell in range SCRATCH_AREA.
SCRATCH_A7	C:H291..C:H291	Seventh cell in range SCRATCH_AREA.
SCRATCH_A8	C:I291..C:I291	Eighth cell in range SCRATCH_AREA.
SCRATCH_A9	C:J291..C:J291	Nineth cell in range SCRATCH_AREA.
SCRATCHB_AREA	C:B291..C:M291	Used for arranging data in appropriate order for plotting.
SCREEN	C:P1..C:P1	Screen used after opening screen.
SCREEN_CORNER	C:P20..C:P20	Lower left corner of the range screen.
SEPTEMBER	A:BE1..A:BJ304	Contains the financial reports for September.
SEP_ACCTPAY	A:BB140..A:BB140	Balance of accounts payable for September.
SEP_ACCTRCVBL	A:BB122..A:BB122	Balance of accounts receivable for September.
SEP_ADVERTISE	A:BB33..A:BB33	Advertising expenses for September.
SEP_ASSET	A:BB291..A:BB291	The performance measure Asset Turnover Ratio for September.
SEP_AUG	C:B509..C:M509	Contains labels for Sep-Aug plots.
SEP_BANK	A:BB121..A:BB121	Balance in bank accounts for September.
SEP_BUILDING	A:BB131..A:BB131	Original cost of buildings owned at end of September.
SEP_CAPSTOCK	A:BB147..A:BB147	Original cost of capital stock owned at end of September.
SEP_CASH	A:BB120..A:BB120	Balance of cash on hand for September.
SEP_CONSUMABLE	A:BB125..A:BB125	Original cost of consumable supplies on hand in September.
SEP_CUSTOMS	A:BB18..A:BB18	Customs expenses for September.
SEP_DATA	A:BE337..A:BE337	Copy of the data entry form for September.
SEP_DATBLNKS	A:BB344..A:BB417	The data inputted for September and located in SEP_DATA.
SEP_DIVDS	A:BI66..A:BI66	Dividends paid in September.
SEP_EXHIBIT	A:BB34..A:BB34	Exhibition expenses for September.
SEP_FREIGHT	A:BB19..A:BB19	Freight expenses for September.



SEP_FURNITURE	A:BB130..A:BB130	Original cost of office furniture owned at end of September.
SEP_GROSS	A:BB293..A:BB293	The performance measure % Gross Margin on Sales for September.
SEP_INTAX	A:BJ50..A:BJ50	Income tax expense for September.
SEP_INTEREST	A:BI11..A:BI11	Interest earned in September.
SEP_INTEXP	A:BB42..A:BB42	Interest expense in September.
SEP_INVENTORY	A:BI24..A:BI24	End of the month inventory for September.
SEP_ISSCAPSTE	A:BI248..A:BI248	Proceeds from issuing capital stock in September.
SEP_LONGDEBT	A:BI145..A:BI145	Amount of long term debt at end of September.
SEP_MARGIN	A:BB287..A:BB287	The performance measure Margin % for September.
SEP_MONTH	A:BG3..A:BG3	Date used in heading of income statement for September.
SEP_NOTESPAY	A:BB142..A:BB142	Balance of notes payable for September.
SEP_OFFEQUIP	A:BB129..A:BB129	Original cost of office equipment owned at end of September.
SEP_OTHER	A:BB43..A:BB43	Other expenses not listed for September.
SEP_PREEXP	A:BB123..A:BB123	Balance of prepaid expenses for September
SEP_PURCHASES	A:BB17..A:BB17	Cost of purchases for inventory in September.
SEP_RETURN	A:BB289..A:BB289	The performance measure Return on Capital for September.
SEP_SALARIES	A:BB39..A:BB39	Office salaries paid in September.
SEP_SALES	A:BI7..A:BI7	Revenue from sales for September.
SEP_SELLEXP	A:BI31..A:BI31	Expenses associated with selling in September.
SEP_SEMINARS	A:BB35..A:BB35	Expenses associated with seminars in September.
SEP_SHORTBORROW	A:BI247..A:BI247	Proceeds from short term borrowing in September.
SEP_SHORTDEBT	A:BI250..A:BI250	Payment made on short term debt in September.
SEP_STAX	A:BI8..A:BI8	Sales tax on inventory purchased in September.
SEP_TAXPAY	A:BB141..A:BB141	Balance of taxes payable for September.
SEP_TRAVEL	A:BB41..A:BB41	Travel expenses for September.
SEP_UTILITIES	A:BB40..A:BB40	Utilities expenses for September.
UPDATE_DATA1	C:B140..C:B140	Menu for updating the data in the months Jan-Jun.
UPDATE_DATA2	C:B188..C:B188	Menu for updating the data in the months Jul-Dec.
VIEW_DATA1	C:B130..C:B130	Menu for viewing the data inputted into the months Jan-Jun.
VIEW_DATA2	C:B135..C:B135	Menu for viewing the data inputted into the months Jul-Dec.
VIEW_PLOT	C:B279..C:B279	Menu for selecting which performance measure to plot.
VIEW_REPORTS1	C:B249..C:B249	Menu for viewing the financial reports for the months Jan-Jun.
VIEW_REPORTS2	C:B254..C:B254	Menu for viewing the financial reports for the months Jul-Dec.
WARNING	C:A638..C:A638	Screen which warns the user after updating a month's data that he•
WARNING_CORNER	C:A657..C:A657	Lower left hand corner of the range WARNING.
\O	C:B3..C:B3	Auto loads the macro MAIN when the file is brought into Lotus.
\M	C:B5..C:B5	Equals the keystrokes ALT + M which execute the macro MAIN.
\R	C:B531..C:B531	Equals the keystrokes ALT + R which execute the macro RESTART.

## LIST OF REFERENCES

1. *Webster's Ninth New Collegiate Dictionary*, Merriam-Webster Inc., 1985.
2. Meigs, R.F. and Meigs, W.B., *Financial Accounting*, McGraw-Hill Inc., 1989.
3. Garrison, R.H., *Managerial Accounting*, Business Publications Inc., 1988.
4. Whitten, J.L., Bentley, L.D., and Barlow, V.M., *Systems Analysis & Design Methods*, Richard D. Irwin Inc., 1989.

## BIBLIOGRAPHY

Donie, E.M., *1-2-3 Release 3 Business Applications*, Que Corporation, 1989.

Dyrud, A., Posner, J., and Zuckerman, M., *The Lotus Guide to 1-2-3 Advanced Macro Commands*, Addison-Wesley Publishing Company Inc., 1987.

Jorgensen, C., *Mastering 1-2-3 Release 3*, SYBEX Inc., 1989.

Lunsford, E.M., *Macros, Menus, and Miracles for Lotus 1-2-3*, John Wiley & Sons Inc., 1990.

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